

INSIDE DOPE
by GEORGE F. TAUBENECK

Stories of the Week
Gags of the Week
Philosophy of the Week
On Foot in the Door?
New Factor in Air Conditioning

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Hearing In N.Y. Kills 2 Bills, Defers Other 2

Licensing of Contractors Still Being Considered; Chances Thought Slim

Stories of the Week

To his deathbed the Founder of the Firm summoned all his relatives. "Pop" tearful daughter Sally, "we'll give you the biggest funeral in Detroit history."

Son John didn't go along with that.

"After all," he interjected, "Dad would like us to conserve his assets. Let's not go overboard with flowers and limousines."

"You're so right," chimed in a daughter-in-law. "We shouldn't be ostentatious. And we can save money by eliminating all those frills."

The Old Man reared up.

"Help me put my pants on," he grumbled, "and I'll walk to the cemetery."

Strike! Long-distance phone operators quit work. Executives were pressed into service in order that the "long lines" be kept alive.

Big Chief Boredchairman plugged in a call from Boston to San Francisco. Obviously the phoner was a child.

"Shouldn't you ask your mother to approve this expensive cross-country EMERGENCY?" he gentled.

Two-seconds pause.

"Yes, it's all right," trilled the same soprano voice. "This is my mother."

"Can you earn money as fast as your wife spends it?"

"Why, yes. She hounds me to save, as a matter of fact. My trouble is I can't keep up with Truman."

Gags of the Week

Most refreshing humorist in many a day is Herb Shriner, the Hoosier Pagliacci. Some of his best gags:

"Congress was real smart this year. They raised the liquor taxes, then made other taxes so high people had to drink to forget their troubles."

"One-way streets didn't work out back home. There was only one road, and when the drivers took it they couldn't get back to town."

"Here in New York I've spent 20 bucks in tips to get my hat back, and still it doesn't fit me."

Philosophy of the Week

"We don't have to match our enemies man for man. We aren't going to dance with them."—ROBERT A. LOVETT, Secretary of Defense.

"Men of cheerful disposition win jackpots."—WILSON MIZNER.

"If an opinion contrary to your own makes you angry, that is a sign that you are subconsciously aware of having no good reason for thinking as you do."—BERTRAND RUSSELL.

"Our basic concept of society is so superior to that of the Russians that, if a total war can be avoided, time definitely is on our side." SENATOR FULBRIGHT of Arkansas.

"The frontiers which divide mankind are not primarily the national or political frontiers. They are frontiers of the mind and the spirit which spring from limitations of training and experience, differences of memory and tradition and belief and taste, and the wilful or accidental exploitation of these limitations and differences for sinister ends."—ROSS McLEAN, Unesco.

"An able man attains power through gentle words and resolute actions."—BERNARD BARUCH.

"Those who discuss sharing the wealth forget the necessity of creating wealth to share. There has recently grown up a philosophy of 'survival of the fittest' instead of the fittest."—DAVID SARNOFF, president RCA.

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NARDA to Ask Mfrs. To Bring Out Only One Line Per Year

CHICAGO—The National Appliance & Radio-TV Dealers Association announced that the first steps toward one annual, basic appliance and TV line from each manufacturer will be taken at its midyear meeting.

The meeting will be held June 22-24 at the Hotel Sherman here.

Mort Farr, NARDA president, said the one-line-a-year drive is aimed at simplifying the retailer's inventory, buying, and promotional problems. The campaign is expected to follow the pattern of the drive for inboard pricing of television which came from the annual convention in January.

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Kelvinator Reduces Low-Priced Models

DETROIT — Kelvinator has announced suggested retail price reductions of \$28 to \$35 on its lower-priced refrigerators. One electric range model was reduced \$13, and \$20 was cut from the suggested price of the company's dehumidifier.

Charles T. Lawson, vice president in charge of Kelvinator sales, said: "We expect these sharp reductions in our lowest price models to give added stimulus to the refrigerator retail trade, which has shown considerable improvement since the suspension of Regulation W."

The new suggested prices follow: Refrigerator models AB and AC, \$194.95; NB, \$199.95; NH, \$239.95; ES, \$249.95; and EA, \$339.95; range model ER-7, \$299.95, and dehumidifier model KD, \$139.95.

No price changes were made on other models.

Few Surprises Expected At Chicago Markets

CHICAGO — Few surprises are expected at the Chicago midyear homefurnishings markets which begins June 16 at the American Furniture Mart and the Merchandise Mart, but hotel space is tight, at least for the early part of the market period, and the usual throng of retailers are expected.

Some price changes may pop up at the markets, although most of the major appliance manufacturers have

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NEMA Refrigerator Sales Drop 44% In 1st Quarter

(See Table on Back Page)

NEW YORK CITY—A 44% drop in refrigerator sales during the first three months of 1952 as compared with the same period in 1951 was reported recently by the National Electrical Manufacturers Association based on figures submitted by 16 member companies.

These firms sold 851,375 refrigerators in the first quarter of this year and 1,503,476 units in the same period of 1951.

March sales volume was just half that of last year. A total of 298,092 units sold this year as compared with 591,449 in 1951. February sales were off by only 35%; from 423,426 units to 277,986 units.

Foreign sales for the quarter did not fall as sharply, being down only 29% from last year. They numbered 54,306 units this quarter as compared with 76,035 in 1951.

Freezer-Food Plans 'Blow Hot and Cold'

DETROIT — Freezer-food activity has diminished on some fronts but on others the plan is still being pushed aggressively.

One of the newest plans is jointly sponsored by Hotpoint Inc. and Grand Union, an eastern food chain. Under this program, each purchaser of a particular Hotpoint freezer will be given \$75 in certificates which can be exchanged at a Grand Union store for frozen food.

In Detroit and Chicago, trade reports indicated that the enthusiasm of some freezer-food plan operators had died down considerably after big initial advertising splash failed to produce expected results. There were several programs, however, still going full blast.

Meanwhile, some big food chains like A&P, Safeway, and Kroger continued to steer clear of the plan. An executive of another chain, Food Fair Stores, Inc., although not concerned over losing business to freezer-food clubs, branded as "misleading" the claims of some plan operators that freezer purchasers can buy food at "wholesale prices."

(Concluded on Back Page, Column 1)

Rathbun Heads Sales At Drayer-Hanson

LOS ANGELES—In one of a series of new appointments announced by George J. Morton, president of Drayer-Hanson, Inc. here, manufacturer of air conditioning and refrigeration equipment, Ross Rathbun has been named sales manager to succeed Albert Hanson, who has assumed the post of plant manager.

Rathbun has a wide background of experience in the industry, having been manager of Westinghouse air conditioning division; vice president of B. F. Sturtevant Co.; and president of Baker Refrigeration Corp. He has served as a vice president of the Air Conditioning & Refrigerating Machinery Association.

Hanson, whose appointment to the

(Concluded on Page 21, Column 4)

'Fortune' Survey

Magazine Asks: 'Who Pays List Price?'... Describes 'Deal' in the Chain Stores

NEW YORK CITY—"Who Pays List Price?" asks *Fortune* magazine in its June issue article of that title, which is a report on the radio-TV-appliance market "where no one appears sure whether it is better to work for the retail markup or give it away."

On the basis of a survey made in a number of major cities, *Fortune* concludes that no more than 10% of the buyers of major appliances in New York and Chicago pay list price, and probably not much higher a percentage in other cities. The survey seems to indicate that the smaller the community, the greater percentage of people paying list price. One dealer is quoted as saying that "anybody who buys appliances at retail list is either illiterate, has a bad credit rating, or is stupid."

In such a market, the magazine points out, the specialty appliance chain can exert considerable pressure. Because it buys in volume, it not only can get price concessions from manufacturers, but is also able

Not Everyone Likes Fast Defrosting, Engineers Told

By C. Dale Mericle

ATLANTA—With an all-day conference on automatic defrosting for domestic refrigerators, a full morning session on all-year residential air conditioning, and a technical research exhibit in addition to three regular technical sessions besides inspection trips and entertainment features, the spring meeting of the American Society of Refrigerating Engineers at the Biltmore hotel here June 1 to 4 proved a busy one.

The Domestic Conference covered the subject of automatic defrosting rather broadly and included descriptions of systems used in five different makes as well as general considerations, but much interest was aroused when users' reactions were presented by Miss Willie Mae Rogers, director of home economics for Admiral Corp.

"In 75% of the cases, women are apparently satisfied with automatic defrosting, but the other 25% are less happy," she declared. "Dealers consider automatic defrosting the most powerful sales tool introduced for the refrigerator in years, but the

(Concluded on Page 21, Column 1)

Vogel Elected ACRMA President; Group Optimistic

HOT SPRINGS, Va.—A. O. Vogel, vice president, The Vilter Mfg. Co., was elected president of the Air Conditioning & Refrigerating Machinery Association at the group's recent annual meeting here.

The three days of meetings of the members of this association, who are manufacturers of commercial and industrial air conditioning and refrigerating equipment, were marked with optimism as to the near-term outlook for sales of the industry's products, particularly of the heavier types of equipment.

Despite the current softness of the appliance market in general, it was felt that, because of the basic essentiality of refrigeration and air conditioning,

(Concluded on Page 4, Column 3)

NEW YORK CITY—Two of the four proposed measures covering licensing of New York City refrigeration contractors and servicemen, and operators of refrigeration systems, were withdrawn, and action on the other two were deferred, at the recent public hearing on the proposals before the city council.

More than 200 members of the industry, users of refrigeration equipment, and other interested parties showed up at the hearing, and the sentiments of the majority of those present were indicated early when Councilman Jack Kranis announced that he was withdrawing Introductory Bill No. 4 and Introductory Bill No. 487 which he sponsored.

Bill No. 4 would have required a licensed operator 24 hours a day on any premises in which refrigerating or air conditioning equipment with a combined capacity of 10 tons or more is maintained. Bill No. 4 would have licensed all individuals servicing household refrigerators of any type.

From the attitude indicated by the council committee members at the hearing it is considered probable that they will table Introductory Bill No. 45, which would set up residence and experience qualifications for operators of refrigeration systems.

Thus, the debate at the hearing was concentrated on Bill No. 524, proposing licensing of master refrigeration contractors, setting up a five-man board to pass on applicants, and giving written examinations to all persons or corporations desiring to engage in the installation and service business. Bill No. 524 was introduced by Councilman Hugh Quinn of Queens.

The proposed contractor licensing measure was attacked from many sides.

Arnold White, representing the Commerce and Industry Association, said the Quinn bill would "have a most crippling effect on the refrigeration and air conditioning industry. It proposes a second system of licensing, inspection, permits, and controls by the Department of Housing and Buildings, superimposed on the already existing controls and authority vested in the Fire Department."

(Concluded on Back Page, Column 1)

G-E Appliance Sales Improving Steadily

LOUISVILLE, Ky.—Sales of General Electric appliances have improved steadily in recent weeks, reports Clarence H. Linder, general manager of the major appliance division, who said the unit retail sales during May were up about 24% from April and were about 25% higher than in May, 1951.

Sales of G-E refrigerators, which were down 27% from 1951 in the first quarter, have picked up to the extent that for the five-month period ended May 31, sales were only 9% behind the comparable period last year.

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Refrigerated Lead Acid Batteries Retain Potency

WASHINGTON, D. C. — A new method for storing lead acid batteries, by which the batteries are refrigerated to maintain potency of the charge, was disclosed recently by Dr. H. C. Diehl, director of the Refrigeration Research Foundation in a report released to foundation members and members of the National Association of Refrigerated Warehouses.

Unlike ordinary warehousing procedures which make frequent recharging of batteries in storage necessary, the refrigerated warehousing method greatly retards the self-discharge of lead acid batteries.

Stored at a temperature of 32° F., batteries require recharging only once every six months. Stored at ordinary air temperatures, recharging is necessary at periods of from one to four weeks.

Battery manufacturers and distributors are constantly increasing their use of public refrigerated warehousing facilities as a consequence of the cost-saving possibilities of refrigerated storage.

Through the Refrigeration Research Foundation continuous research is being carried on in the field of new products for refrigeration. Each prospect is thoroughly tested before being recommended to the industry at large as a suitable item for commercial storage.

TRRF is the important research and technical adjunct of the refrigerated warehousing industry represented by the National Association of Refrigerated Warehouses.

Bush Mfg., Heat-X Name Their Sales Engineer

WEST HARTFORD, Conn.—Bush Mfg. Co. here and Heat-X-Changer Co. of Brewster, N. Y. have announced the appointment of Howard J. Theis as sales engineer for both companies. His headquarters will be in Minneapolis.

Theis has long been identified with the refrigeration industry and its wholesale distribution phases. In his new position he will cover North and South Dakota, Nebraska, Iowa, Minnesota, and the northwestern portion of Wisconsin.

Appointment of Theis completes the expansion program of both companies, establishing nationwide coverage. Sales engineers and branch offices are strategically located so as to better serve the many Bush and Heat-X-Changer customers.

Ross Roy New Ad Agency For Servel A. C. Division

EVANSVILLE, Ind.—Ross Roy, Inc. of Detroit has been appointed as the new advertising agency for the Air Conditioning Div. of Servel, Inc. It was announced by Robert M. Stevens, Servel advertising manager.

"The fast growth of the market for air conditioning and the steady expansion of the Servel air conditioning line," Stevens said, "are reflected in Servel's plans for greatly increased advertising in all media."

Servel recently announced the appointment of Hicks & Greist, Inc. of New York, as the advertising agency for its appliance line.

OPS Interpretations: Several Affect Contractors Handling Appliances Refrigeration, and Air Conditioning Services

WASHINGTON, D. C.—The first dozen interpretations of Ceiling Price Regulation 93, which governs construction and related services and sales of installed materials, were issued recently by the Office of Price Stabilization.

Interpretations affecting contractors handling appliances, refrigeration, and air conditioning services are as follows:

Interpretation 1: Minor plumbing and electrical services, such as cleaning a drain or repairing a leaky faucet or a defective electrical switch, would be considered "the repair of an existing building," under section 2 (a) (1) and would be governed by CPR 93. However, services consisting of the installation, maintenance, and repair of "appliances" would be excluded from CPR 93 by section 3 (b).

Interpretation 3: Section 3 (b) provides that separate installed sales of appliances are not covered by CPR 93. However, where installed sales of appliances constitute an incidental part of a building contract, which contract is covered by CPR 93, the installed sales of appliances are subject to CPR 93.

Interpretation 4 (in part): Where a manufacturer sells commodities and makes a separate charge for installation or erection services, section 2 (a) (3) provides that the ceiling prices for the installation or erection services alone are determined under CPR 93.

In such instances, under section 3 (c), ceiling prices for the commodities, as distinguished from installa-

tion or erection services, are established pursuant to the General Ceiling Price Regulation or the applicable manufacturer regulation.

The foregoing situation is to be distinguished from the situation where the manufacturer sells commodities and services without a separate statement of charges for each. In the latter situation, the entire transaction is priced under CPR 93.

Interpretation 7: Filing under CPR 34 is not a prerequisite to the establishment and use of ceiling prices under CPR 93. As of the effective date of CPR 93—Nov. 20, 1951—CPR 34 was superseded as to construction services covered by CPR 93.

Therefore, a seller of construction services under CPR 93 need not comply with the filing requirements of CPR 34 before he can apply the provisions of CPR 93. However, this will not affect the seller's status in respect to past transactions when he was under CPR 34.

Interpretation 10: Where a seller had a CPR 93 base period practice of applying markups to materials costs, he must apply information in Part 2 of Form 101 regarding his base period materials costs and his percentage markups over such costs.

In determining his markups on varying categories of materials, many sellers used the prices shown in catalogs, price guides, or price services as their costs. Although CPR 93 has not specifically authorized the use of such publications, in some cases it may be practical, however, for a seller to refer to a catalog, price guide, or price service to determine his materials costs in lieu of a separate listing of all the materials in Part 2 of Form 101. However, this must conform to the seller's base period practice.

The instructions accompanying Form 101 require that the seller list "every type of category having a different percentage markup." If during the CPR 93 base period a seller varied his markups for different categories of materials, and the same catalogs, price guides, or price services then and now used by him broke down the materials into the same categories, OPS instructions would be satisfied by the seller's reference to that publication for the breakdown of categories.

The percentage markups which the seller reports for each category must reflect his actual base period practice and, further, must correctly reflect the reduction in profit percentage as required by CPR 93.

To the extent that it meets, for any seller, the foregoing criteria, the use of a catalog, price guide, or price service as a reference by that seller may be approved.

Some sellers during the CPR 93 base period customarily used overhead and profit percentages based upon selling prices rather than upon costs. Such sellers may, in Part 2 of Form 101, use markups in terms of percentages to sales rather than percentages to costs if such markups

are identified as being formulated on that basis.

Interpretation 11: Filing on Form 101 is required only from those sellers who sell construction services on an hourly rate basis or on a time and materials basis and who determine ceiling prices upon one or more of the subparagraphs of section 21.

Form 102 need be filed only by a seller who, due to an increased labor cost incurred subsequent to his originally filing on Form 101, finds it necessary to increase an hourly rate which he had previously reported on Form 101.

Filing on Form 103 is required only from those who sell construction services on an installed sales basis subject to section 22 (c).

Form 104 need be filed only by one who, due to an increased commodity cost incurred subsequent to his original filing on Form 103, finds it necessary to increase a ceiling price which he had previously reported on Form 103.

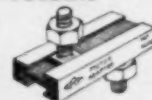
Those who sell construction services on a lump-sum or cost-plus contract basis and who are subject to the provisions of sections 12, 13, 14, 15, or those who sell on an installed sales basis, subject to section 22 (a) or 22 (b), need not file a report in connection with those services.

However, these sellers must comply with the special record keeping requirements of section 31 (b), as well as with the general record keeping requirements of section 31 (a).

Interpretation 12: If a lump-sum contract is entered into, and, later, there is extra work on the same job, which is to be billed on an hourly basis, section 21 is applicable to such extra work, and information relating to such extra work must be reported on OPS Public Form No. 101, as required by section 32 of CPR 93.

PARTS JOBBERS

Have you any one item that sells a host of other units? If you can answer YES, then we know you are handling Motor Adapters, and we know also, they are selling motors, belts, pulleys, controls and other allied items for you.



1/2 to 1/2 hp.—101-D
1/2 to 1 hp.—102-C
1 to 3 hp.—103-C

Engineering Research Associates Inc.
3475 East Nine Mile Road
Hazel Park 7, Michigan

AIR CONDITIONERS

3 to 50 Ton Units complete with evaporative condensers

BAL-AIR MANUFACTURERS
P. O. BOX 576
COLUMBIA, S. C.

AMERICA'S FINEST, MOST COMPLETE

BEVCO

Line of COOLERS

WATER FITTINGS
WET OR DRY
SINGLE FAUCET
DOUBLE FAUCET
MOUTH BUBBLER
HEAVY DUTY ROLLER CASTERS

QUALITY COOLERS YOU CAN FIT INTO YOUR LINE and SELL AT A PROFIT

You sell quality, trouble-free cooling in these electric units that operate wet or dry. In 3 sizes . . . 4, 5, 6 ft. Unobstructed interiors. Baked Enamel finish for beauty and sanitation.

The BEVCO Company, Inc.
2316 24 S. BROADWAY • ST. LOUIS 18, MO.

SEND FOR CATALOG N-1

HENRY LINE VALVES

really give you something extra

They give more dependable service because of advanced field-proven design and construction as well as patented features.

PACKLESS VALVES

FOR FREON
with Exclusive
Balanced-Action



STANDARD TYPE

Ball check in balancing channel permits diaphragm inspection and replacement with valves under line pressure. Sizes, 1/4" thru 1/2" flare; 1/4" thru 1" O.D. Solder, 1/4" thru 1" F.P.T.



BLUE BANTAM TYPE

Same as standard Balanced-Action valve except that diaphragms cannot be inspected or replaced under line pressure. Size 1/4" thru 1/2" flare and O.D. Solder.

PACKED VALVES

FOR FREON
Bronze-Wing
Cap Type



Globe and angle types with solder connections, bolted bonnets, sizes 1/4" thru 5/8" O.D.

SEMI-STEEL WING CAP TYPE

With bolted bonnets and square companion flanges. Furnished with brass tailpieces (O.D. Solder) 1 1/2" thru 5 1/4" or with steel tailpieces for welding to pipe, sizes 1 1/4" thru 5".



Also Globe and angle types with F.P.T. connections, sizes 1/4" thru 2".

PACKED VALVES

FOR AMMONIA
Permanent-Mold Iron
and Semi-Steel



Compact and strong with self-aligning stem disc. Sizes (F.P.T.), screw bonnet: 1/4" thru 1", bolted bonnet 1 1/4" thru 2"—with flange connections 1 1/4" thru 5".

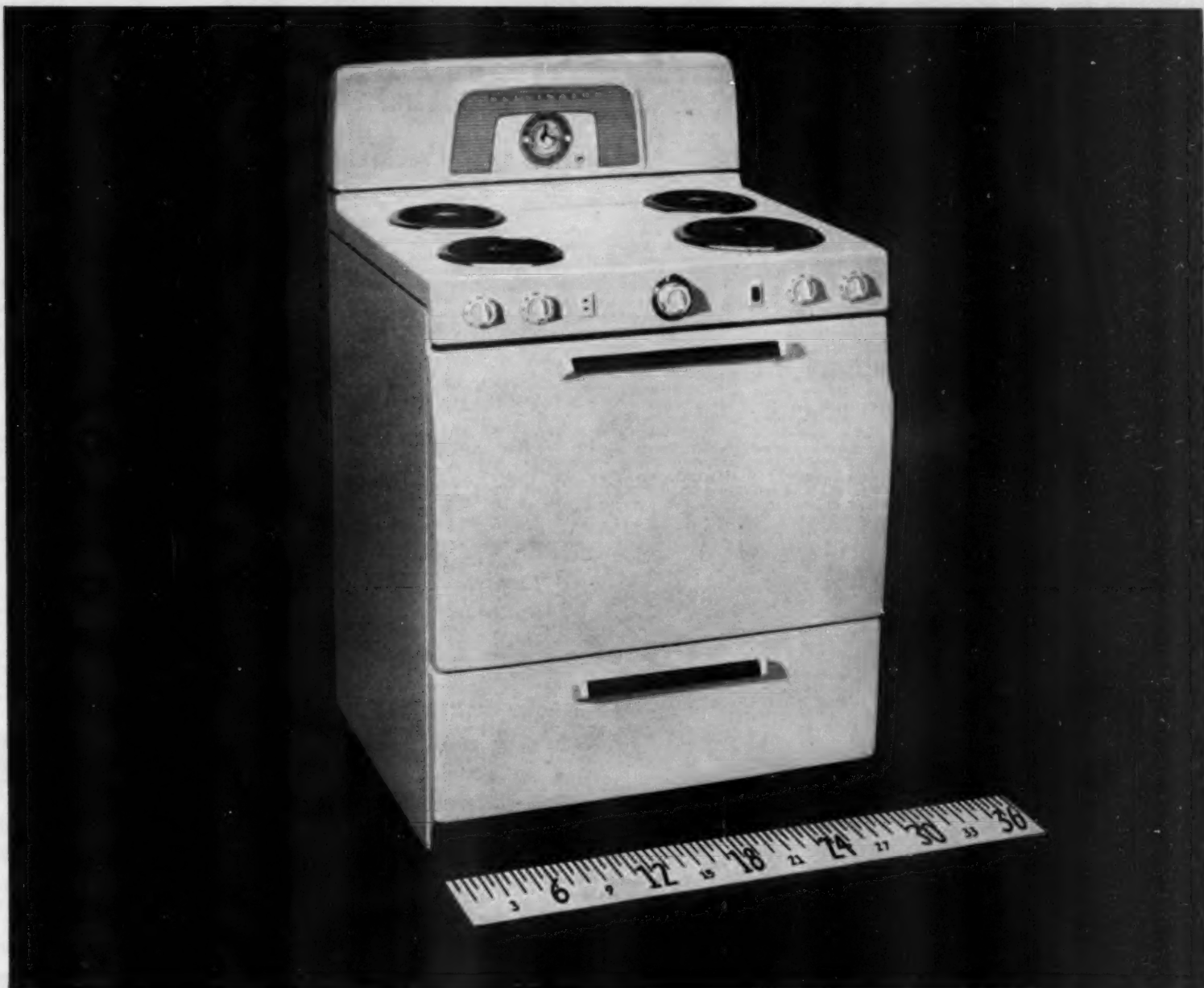


HENRY—Standard equipment by leading Manufacturers, Army, Navy, Coast Guard and Maritime Commission • Stocked by Leading Jobbers
WRITE FOR CATALOG

HENRY VALVE CO.

Valves—Driers—Strainers—Control Devices and Accessories for Refrigeration, Air Conditioning and Industrial Applications
MELROSE PARK, ILL. (CHICAGO SUBURB)
CABLE: HEVALCO, MELROSE PARK, ILLINOIS





Here's 30 inches of brand new sales power!

A 30" range—a beautiful new addition to Kelvinator's exciting 1952 electric range line that means immediate sales action for Kelvinator retailers. Budget-priced, it's the greatest "little giant" you've ever laid eyes on . . . big range performance . . . at a small range price!

Look at the style in its streamlined design. Its "Great Scot" oven is great in size and Scotch in thrift . . . it's large enough to roast all of a holiday dinner right along with a big turkey . . . or to bake 10 loaves of bread. This whopper of an oven has super-fast pre-heat with automatic cut-off—a feature usually found only on

much higher priced ranges!

Four high speed surface units . . . each with 7 measured heats. A roomy storage drawer. A convenient appliance outlet. A built-in Automatic Oven Timer that is a part of the streamlined design of the range, not an added accessory.

Yes, here's a brand new electric range that provides real sales power in today's market for alert Kelvinator retailers . . . new proof that Kelvinator is the most valuable franchise in the appliance industry.

THERE IS A BETTER ELECTRIC RANGE . . .

IT'S **Kelvinator**

THE MOST VALUABLE FRANCHISE IN THE APPLIANCE INDUSTRY
ELECTRIC REFRIGERATORS...RANGES...FREEZERS...WATER HEATERS...DEHUMIDIFIERS

KELVINATOR • DIVISION OF NASH-KELVINATOR CORPORATION • DETROIT 32, MICHIGAN

NARDA To Meet In Chicago June 22--

(Concluded from Page 1, Column 2)
Details of the campaign will be presented during the meeting's opening breakfast session on June 23.

NARDA said that two days of the meeting followed a reception on Sunday evening, June 22, will be devoted to the subject: "How can a dealer best direct his efforts, funds, and staff energies to realize a larger, cleaner profit?"

The meeting proper will start with a breakfast session Monday. Ed Hegarty, director of sales training for Westinghouse, will be the speaker.

One of the speakers at the general session to follow will be Stanley Wolkenheim of A. O. Smith Corp. He is scheduled to talk on reasons and methods for increasing water heater sales activities by retailers. Feature of the Monday luncheon session will be a talk by Paul Galvin, president of Motorola, on the status of television and the way dealers can best profit from it.

Monday afternoon is to be given over to group discussions on topics of special interest to the dealers. Authorities will head the discussions.

Two low-cost items will be reviewed Tuesday morning. How to sell ironers, with demonstration will be the topic of Hal Biddle of Ironrite, and electric blanket merchandising will be discussed by C. R. McLean, manager of sales of General Electric Co.'s automatic blanket department.

The Tuesday luncheon speaker will be Dr. Alfred P. Haake, author, lecturer, and consultant to General Motors. An inspiration speaker, Dr. Haake is mayor of Park Ridge, Ill., and author of a widely-read column.

After lunch, the major television session of the meeting will be held, with P. H. Leslie, G-E television sales manager, giving the keynote talk. Then Mort Farr, NARDA president, will review new developments.

H. B. Price, Jr., NARDA vice president, will devote one hour of Tuesday's program to a sales-through-management demonstration. In this presentation NARDA said, he will pass on "some of the secrets behind the remarkable sales record his Norfolk and Portsmouth organization has set in recent months."

Other topics to be covered at the meeting are dealer promotions, service at a profit, display, advertising, sales projection, freezer promotions, and what lies ahead for NARDA. A. W. Bernsohn, association managing director, will discuss the latter.

The sessions will be climaxed with a dinner Tuesday night.

A feature of the meeting will be a dealer competition for effective newspaper advertisements they've used. Three categories—full page, half and quarter page, and a campaign using less-than-quarter page space—have been set up for separate consideration in selecting winners.

A jury of industry and advertising leaders will judge the presentations. The winning ads will be mounted and displayed in a "Merchandising Gallery" during the meeting. In addition to ads, NARDA members have been invited to send in business forms, direct mail pieces, promotional aids, and record-keeping systems for inclusion in the gallery.

A women's program is being planned for the wives attending the convention with their husbands.



GEORGE SOKOLSKY, newspaper columnist and radio commentator, addresses the annual luncheon of the Air Conditioning and Refrigerating Machinery Association. At the speakers table from left to right were: M. M. Lawler, Worthington Corp., ACRMA first vice president; A. P. Shanklin, Carrier Corp., retiring president; A. O. Vogel, Vilter Mfg. Co., newly elected president; and G. A. Heuser, Henry Vogt Machine Co., treasurer.

ACRMA Elects Vogel President--

(Concluded from Page 1, Column 4)
tioning, the sales of the industry's output of smaller "packaged" products would not be retarded, and demand was reported as continuing strong.

Other new officers elected include: M. M. Lawler, Worthington Pump & Machinery Corp., first vice president; A. J. DeFino, Fedders-Quigan Corp., second vice president; and G. A. Heuser, Henry Vogt Machine Co., treasurer.

In addition to the officers, the following were elected to constitute ACRMA's board of directors:

W. H. Aubrey, Frick Co.; H. B. Donley, General Electric Co.; Maynard Ford, Parks-Cramer Co.; J. A. Gilbreath, Servel, Inc.; B. W. Hanson, Schaefer, Inc.; J. F. Knoff, Airtemp Div., Chrysler Corp.; S. E. Lauer, York Corp.; M. E. Mooney,

Baker Refrigeration Corp.; A. B. Newton, Acme Industries, Inc.; A. P. Shanklin, Carrier Corp.; T. E. Smith, Westinghouse Electric Corp.; W. F. Switzer, Frigidaire Div., General Motors; G. E. Wallis, The Creamery Package Mfg. Co.

George Sokolsky, newspaper columnist and radio commentator, was the principal speaker at the association's annual luncheon. Dr. A. R. Oxenfeldt, consulting economist and marketing specialist, led discussion in a general conference on "Marketing Problems—Present and Future."

Chicago Markets--

(Concluded from Page 1, Column 2)
made their price adjustments in recent weeks.

In the way of new products, Amana will introduce 8-cu. ft. and 14-cu. ft. chest-type models, priced at \$279.50 and \$399.50, respectively, to go along with its heavily promoted upright models. Kelvinator will be showing its new 30-in. deluxe type electric range, and Appliance Mfg. Co. and Odin Mfg. Co. will show new clothes driers. Other manufacturers will show models introduced in the interim since the January markets.

The Merchandise Mart will again provide free bus service for buyers. Buses marked "Merchandise Mart Buyers' Courtesy Bus" will run daily from Loop hotels to the Merchandise Mart in the morning from 7:30 a.m. until 10 a.m. at 10-minute intervals, and from the Merchandise Mart back to Loop hotels in the afternoon after 4 p.m.

Also, the buses will run between the Merchandise Mart and the American Furniture Mart at half-hour intervals between 10 a.m. and 4 p.m.

CORRECTION

The Jarow Products advertisement in the May 19 issue of the NEWS contained the statement that "Jarow refrigerator gaskets are again made from crude rubber." This was in error as Jarow Products have been using pure rubber in their gaskets continuously since the war.

'Fortune' Survey--

(Concluded from Page 1, Column 4)
chopped," says the article, "the first price quoted is full list. If the customer shows no sign of buying at this price, or cites a lower price that he has already been quoted by some other dealer, the salesman is authorized to go down to a certain level."

"If this proves insufficient, even when accompanied by all the blandishments of salesmanship, the customer is handed to a 'T.O.' (turn-over) man, usually an assistant manager or manager, who is authorized to go still lower."

"If the customer still shows signs of wanting to shop around, just as he leaves he is given the 'burn-up price'—a price so low that he is not likely to find it undercut elsewhere."

"Then when he returns, the store first tries some switch selling; but should that fail, a little 'outboard pricing'—charging for delivery, warranty, installation, etc.—can keep the burn-up price from being a money-loser. The calculation is that the customer will be too embarrassed to walk out a second time."

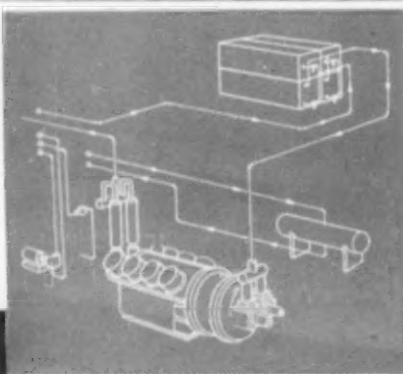
But, says *Fortune*, the very uniformity that makes the customer willing to seek out a discount is likewise the strongest argument in favor of a uniform list price. If the article is the same everywhere, then with small adjustments for freight, etc.—it ought to sell everywhere at the same price. And in the long run the discount tends to leave the customer dissatisfied; for he can never overcome the fear that he may have been a sucker, that some other more enterprising buyer managed to get a 20% discount instead of 15%.

Fortune's suggested answer to price cutting is hardly novel—more specialty selling. But it gives a pretty exact definition of the kind that is needed when it defines it as:

"Generally home selling; though it is usually done on leads, it may even be door-to-door; it uses advertising less to pre-sell customers than to help salesmen locate prospects; and it involves the most assiduous and skillful use of personal contacts to make one sale lead to another."

ANACONDA All-Copper

refrigeration piping
cuts installation costs



Copper Tube lines to evaporative condensers and sub-cooling coils. Inset is schematic sketch showing the rest of the 80-ton system, including compressor, receiver tanks and direct expansion coils; also recirculating lines and replacement water supply to evaporator.

ANACONDA PRODUCTS FOR THE REFRIGERATION INDUSTRY

Copper Tubing
Restrictor Tube
Rounded Tube
Thermal Expansion Bulbs
Foamed Tube Parts
Hard Copper Tube cut to length
Copper Water Tube in coils or straight lengths
Fittings
Vibration Eliminators
Flexible Metal Conduit

Pictured here is part of an air conditioning system recently installed in a large office building. Noteworthy is the fact that ANACONDA Copper Refrigeration Tubing, ANACONDA Wrought Copper Fittings and American Vibration Eliminators were used throughout. This lightweight tubing with solder-type fittings was selected because of its easy installation and lower labor costs. Also important was the fact that copper tubing is non-rusting and corrosion-resistant and therefore ideally suited for water and refrigerant lines.

If you are concerned with the design or installation of an air conditioning or refrigeration system, you'll find it pays off in long-time dependable service to specify ANACONDA Refrigeration Products. The American Brass Company, Waterbury 20, Connecticut. In Canada: Anaconda American Brass Ltd., New Toronto, Ontario.

for consistent uniformity—ask for

ANACONDA refrigeration products

Cunningham

WE HELP YOU
SELL PROFITS

Announces the NEW 8 Foot
Fresh Vegetable Display Cabinet



- Electric Defrosting
- Tri-Level Display
- Proper Temperature
- Excellent Humidity

- Tecumseh 1/2 H.P. Unit
- All Steel Welded
- Baked White Enamel
- Low in Price

For selling details write to:

CUNNINGHAM PRODUCTS COMPANY
8790 GRINNELL DETROIT 13, MICH.

"I just can't risk food spoilage!"

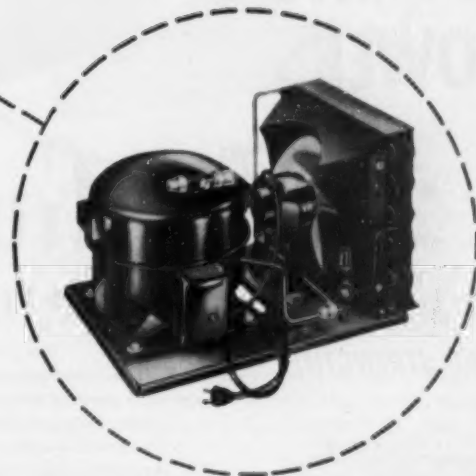


No merchant can risk food spoilage . . . and no manufacturer of frozen food display cabinets can risk using unreliable condensing units in the equipment he builds. That's why the name Tecumseh has become synonymous with dependability, and that is why more than 2/3 of all manufacturers of frozen food cabinets specify Tecumseh as standard equipment on all models they make.

Of course there's a reason! Manufacturers know that Tecumseh's internal spring mounting and forced feed lubrication gives them a smooth, quiet and vibrationless unit that they can rely upon for low-cost, trouble-free operation. Yes, customer satisfaction can be assured when a Tecumseh Hermetic is specified as standard equipment in their frozen food cabinets.

No wonder Tecumseh's present production is over 200,000 units per month, and today there are more than 8,000,000 Tecumsehs in the hands of satisfied users.

Let us send you a catalog today describing these Tecumseh units.



TECUMSEH PRODUCTS

TECUMSEH, MICH.

Company

EXPORT DEPT.: 2111 WOODWARD AVE., DETROIT, MICH.

★ The world's largest producer of compressors and condensing units for the refrigeration industry. ★

100-Ton Cooling System Keeps Professional Offices Occupied Despite High Rentals

WACO, Texas—“Color-coding” of all equipment, lines and controls, as well as excellent housekeeping in all phases of basement refrigeration and heating rooms, has made air conditioning pay a double profit for the management of the Professional building here.

The Professional building, which contains some 70 offices for physicians, dentists, lawyers, etc., installed a 100-ton air conditioning system during the spring of 1951. Nuckols-Cathey, local Carrier dealers, were contractors on the job, which provides for individual fan stations on 10 floors, supplied by two 75-hp. Carrier reciprocating compressors. A steel-and-tube cooler provides chilled water pumped through risers installed in what was formerly the chimney for a coal-fired boiler.

The system provides approximately 15 tons of air conditioning capacity per floor. Each unit is complete with coils supplied by chilled water from the basement refrigeration plant, a blower of approximately 3,500 c.f.m. capacity, thermostat, and air washer.

Through adept use of space, it was possible to convert large closets, or tiny utility rooms into fan stations without sacrificing office space, except on two floors.

On the sixth and ninth floors, two separate units were installed to permit large physicians' offices on the fifth and eighth floors to remain as is without cutting up any of the space or waiting rooms involved. The

two units on the sixth and ninth floors each cool one-half of the floor below, as well as one-half of the floor on which they are mounted, thus providing two zones.

Distribution from the 15-ton units was provided by converting the ceilings or hallways on each floor into 12 x 40-in. ducts. A furred, false ceiling was dropped 12 in. from the original ceiling and plastered over. It distributes cooled air via one louvered grille per room through each office. Hallways themselves serve as return ducts, with a grilled outlet set in the door to each office to provide circulation.

One of the outstanding features of the installation was the fact that the building had its own low temperature shallow well. Some \$4,000 was saved in the initial installation of the air conditioning system by utilizing well water to cool the condensers, and eliminating the usual water saver and cooling tower altogether. Enough water is provided by the shallow wells that it may be shot right into a storm sewer after use, without prohibitive waste.

Every inch of pipe, every control or piece of equipment throughout the air conditioning system has been “color-coded” by J. L. Holley, resident engineer. Refrigerated pipes, for example, are done in jet black, while steam pipes are in red, water pipes are in green, and gas pipes are done in orange.

A variety of pumps, compressors,

boilers, and steam units, are done in corresponding colors with the lines which service them, and every piece of equipment is railed off with stainless steel railings. With the entire basement power plant area swabbed down thoroughly every day, the Professional building basement is literally “a showplace,” according to L. B. Thomas and Joe Thompson, San Antonio real estate men who operate the building.

“Prospective tenants are always taken on a tour of the refrigeration, heating, and power plant, even before they are shown into the prospective office quarters,” Thomas pointed out.

“Net results are that the customer is always favorably impressed on management and good housekeeping and we find that there are far less complaints over the inflated rents which are necessary during these times.”

Farr Names 4 Representatives

LOS ANGELES—Four new manufacturers' representatives have been appointed by Farr Co. here, manufacturers of Far-Air filters, it was announced recently by J. D. McCampbell, sales manager.

The new appointments are as follows:

Donald Southard of Denver, who will cover the Colorado and Wyoming territory. F. W. Jenike Co. of Cincinnati, for the Cincinnati trading area and Kentucky. The Charlie Wood Co. of Columbus, Ohio, representing Farr in Columbus, Dayton, Mansfield, and Coshocton trading areas. The William M. Shank Co. of Indianapolis, in southern Indiana.



by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

“To hate is to be buried alive in a hell of one's own imagining.”—London News.

A thing done right today means less trouble tomorrow.

“In a growing business every man who prepares a better man to take over his job provides a stepping stone for himself.”—W. T. GRANT.

One Foot in the Door?

A praised study by Walter Horvath indicates that business firms are emphasizing salesmen's training to a much greater degree nowadays than they did in 1946-1951.

Based on personal interviews and questionnaires received from key sales executives, the study indicates that there will be an unusual burden on salesmen during the coming years. Trouble is, few are prepared for it.

The pattern of buying created since the Korean war—relatively short periods of accelerated purchasing, especially by consumers, followed by periods of inactivity—is creating a sense of confusion in many large sales forces.

Increased salesmen's training programs is the lever many top executives are using to pry loose latent sales activity. “Businessmen,” according to Horvath, “are determined not to let the mistakes of the World War II period happen again, when salesmen were permitted to get ‘soft’ during the easy selling period and had little idea of how to handle a difficult role.”

These firms are discovering that many of their salesmen are not too far removed from college or army training programs and, unlike the “old timers,” don't resent being taught.

Other factors influencing increased sales training budgets for 1952: armament slowdown, which will result in an increase in competitive selling, the economic ramifications of the presidential election, and the possibility that present marketing and selling techniques are not adequate for the probable volume of production.

Incidentally, our own books, “One Foot in the Door,” “Both Feet on the Ground,” “It's a Great Life,” and “The Marshal's Baton” are being used successfully in several sales training programs. Details on request.

New Factor In Air Conditioning

By using activated coconut shell carbons, as much as 90% of the foul odor can be removed from a room, office, plant, or similar types of interiors.

This industry started in France during World War I, when an enemy gas attack sent U. S. Army officials scurrying for a means to defend against chemical warfare. Dr. O. L. Barnebey was called in to help. (He is now President of the Pur Air Div. of the American Solvent Recovery Corp., Columbus, Ohio.)

“We studied all the raw materials that we could think of, and we got suggestions from congressmen, women's aid societies, from everybody and everything and most of them were tried out,” Dr. Barnebey recalls. “Altogether, we must have carbonized 7,000 raw materials.

“We wanted to find a good base on which we could found a process for developing activity to take up gases, particularly war gases, since ordinary charcoals would not do that.”

Activated charcoal eventually resulted from these preliminary workings of 350 men—technical men, physicians, chemists, engineers, tradesmen.

Back in 1919, the Barnebey-Cheney Engineering Co. was formed to “go into the activated charcoal business”—even though such a business had not existed previously. There was no commercial demand for activated charcoal.

First sale and installation was made to an industrial alcohol firm.

“We made installation in the leather industry. That was highly successful and this company installed units for all of their plants.

“Cellophane plants where water-proofing was necessary, installed our activated charcoal system, and so it has gone from one thing to another,” according to Dr. Barnebey.

“A prominent motor company had our plant installed soon after and it's still in operation.”

The American Solvent Recovery Corp. was established in 1924 “to build equipment to use our activated charcoal on a commercial scale,” he reports.

“Air conditioning,” Dr. Barnebey believes, “will be used more extensively in homes. It will increase in popularity in public buildings. It will be used in many, many places. The same degree of success, in our opinion, will be had in domestic and commercial air conditioning as we have had with our equipment in industrial operations.”

His company is the world's largest manufacturer of activated carbons, and is importing 1,000,000 pounds of coconut shells a month.

Here's the way
to plug costly
water waste!

WITH **HM**
**COOLING
TOWERS**

20-Year Guarantee!

ON THE WETTED DECK SURFACE

BATTLESHIP STRENGTH!

HOUSING—

Of heavy 10 gauge (1/4") sheet steel, with three coats of Bitumastic lining, and four coats of outside special weatherproof paint. Electrically welded cabinet.

FAN & DRIVE—

Quiet hi-pressure 8-bladed Stainless Steel fan, stainless steel shaft, chrome-dipped cast-iron pulleys, ball-bearing grease-sealed fan bearings.

Capacity ranges 5 thru 50 tons.

CARRIED IN STOCK BY LEADING WHOLESALEERS EVERYWHERE

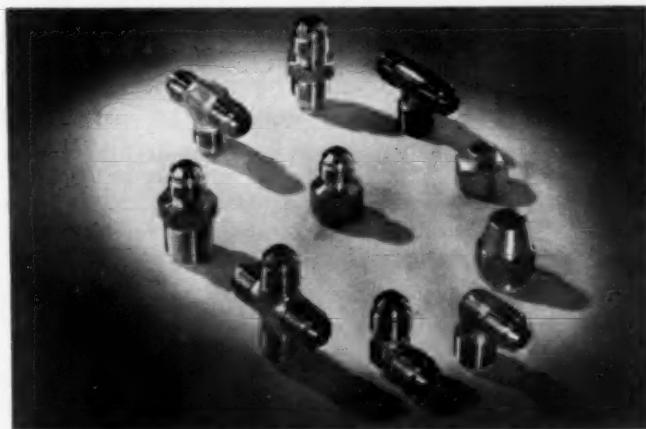
Send for Literature and Prices

Here's the economy way to water savings—20 years of foolproof performance in an all-around, efficient, economical and lastworthy cooling tower. The processed wetted deck surface in these quality Halstead & Mitchell cooling towers is chemically treated with special Koppers wood—guaranteed 20 years against rotting, and proofed against fungi growth. Gravity-type distributing pan eliminates extra pumping head required on spray-type towers, and cuts down windage losses due to atomizing of water. And, it's easily cleaned—accessible through inlet air side of tower.

HM
Halstead & Mitchell

OFFICES: BESSEMER BUILDING • PITTSBURGH 22, PA.

• Where Quality Counts Most — it's KEROTEST 3 •



HEAVYWEIGHT FITTINGS

Refrigeration Quality

✓ **BIG HEX** means secure wrench grip and no twisted-off corners.

✓ **FORGED BRASS** is non-porous—proof against pinholes.

✓ **DRY SEAL THREADS** assure a leak-proof joint.

✓ **LONG THREADS** pull up snug with plenty of shoulder clearance.

See your
Kerotest Wholesaler
FIRST

KEROTEST

KEROTEST MANUFACTURING COMPANY
Pittsburgh 22, Pa.

Commercial Refrigeration



Refrigeration coils in two fountains help cool water so that some 5,000 trout will be happy in this desert fisherman's paradise.

5,000 Trout Frolic In Refrigerated Pool Built In Desert for Nevada Fishermen

LAS VEGAS, Nev.—Maintaining a trout pool in the middle of the desert where freezing temperatures are almost unknown, and the thermometer often goes to 130° F. in the sun, is done by the Twin Lakes Ranch with the aid of mechanical refrigeration.

It maintains the mountain stream sport for tourists and southern Nevada sportsmen in an area near Las Vegas that is so arid that no attempt is made to graze cattle or sheep.

The ranch has a 110 by 150-ft. pool stocked with 5,000 trout in perfect comfort despite high temperatures. Located in land which receives only three inches of rain fall per year, water is provided by artesian wells. Except for the summer, water is cooled simply by pumping it through two fountains. Each minute, 400 gals. of well water flows through them.

Naturally, the underground water supply is too warm for trout. In summer it comes out of the ground at 80°. In the winter, the tempera-

ture is 65°. Water is cooled 5° each time it cascades down the sides of the fountains through contact with the air and evaporation.

Each pumping brings the water temperature down and adds to the large oxygen supply needed by so many fish.

However, this is inadequate in hottest summer months and refrigeration coils have been installed to cool the water further as it flows across them. Cottonwoods planted on all sides keep at least half the pool in shade at all times.

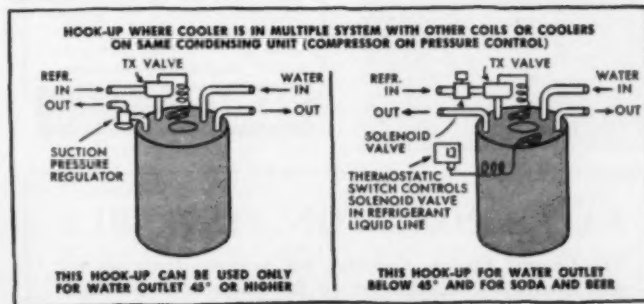
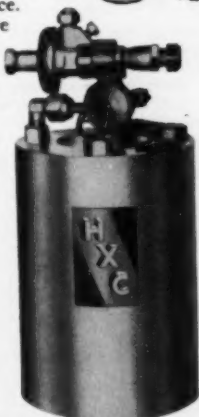
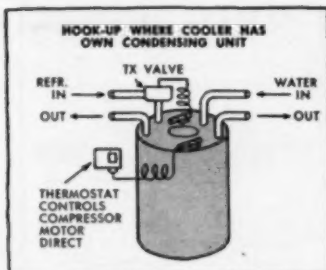
Fishermen are provided with fly-rods and enameled lines, to afford extra sport. They may use their own equipment and artificial flies.

A pole charge is made, which is refunded when the customer catches fish. These are charged according to length. Numbered tags attached to the tails of some of the trout are good for \$1 to \$100 prizes. Fish are brought weekly from a Colorado mountain hatchery.

EASY DOES IT.

WITH **heat-x** LIQUID COOLERS

Simplified construction makes Heat-X Liquid Coolers easy to install and easy to service. Separate liquid and refrigerant coils are cast within single aluminum block... positive insurance against freeze-up damage. No oil separator or surge drum necessary. Single and multiple hookups illustrated below.



WRITE DEPT. ED FOR SPECIFICATION SHEETS

THE HEAT-X-CHANGER CO., INC.
BREWSTER, NEW YORK

Refrigeration Coils, Dehumidifier Protect Seed Corn

Near Freezing Temperature,
Low Humidity Extend
Seed Life Many Years

LA FONTAINE, Ind.—Use of refrigeration coils and a dehumidifier to preserve seed corn for an indefinite period has been started by a few experiment stations and at least one commercial firm.

The latter is the C. E. Troyer seed house near here where equipment has been installed to keep several hundred scarce inbred corn strains indefinitely.

Heretofore, the \$100,000,000 hybrid seed corn industry has figured that seed corn more than one year old does not usually give germination satisfactory for field planting. For most strains, five years is the limit of germinating ability under ordinary storage conditions.

However, tests by the U. S. Department of Agriculture already made have proven that keeping seed at temperatures only slightly above freezing and with a minimum of moisture in the air insures long life. Samples kept under such conditions for 30 years have shown good germination.

The Troyer installation is in a room 39 ft. long, 14 ft. high, and 13 ft. wide. Three inches of fiber glass insulation is used throughout the walls.

Metal drawer filing cases and shelving which extends to the eaves contain the seed samples, many of which are unobtainable elsewhere. Their value is incalculable because



The Bush units mounted on the ceiling of the C. E. Troyer seed room near La Fontaine, Ind., coupled with a dehumidifier, hold temperatures between 32° and 40° F. and 10% r.h.

of this fact. Included are specially bred strains from South Africa, Yucatan, Guatemala, and all over the United States.

The equipment for protecting the corn was installed by Russell Thompson, refrigeration dealer and freezer-locker plant operator of Lagro, Ind.

The compressor for refrigeration and dehumidifying is run by a 3-hp. motor. Bush units and Ranco controls are used.

Temperatures are held between 40° and freezing, but not allowed to go under freezing. Humidity is kept at a maximum of 10%.

BRUNNER REFRIGERATION CONDENSING UNITS give you all 3!

Three reasons
"Brunner Quotes"
get you orders!

PERFORMANCE that you get only with units that are soundly engineered, rugged, and precision manufactured. Slow-speed "open type" compressors, extra deep cylinder cooling fins, fan type flywheels, oversize condensers and a score of other Brunner features that reflect constant engineering research and years of proven success.

ECONOMY that is recognized by thousands of users of commercial and industrial refrigeration and air conditioning. Men who watch operating and maintenance costs are Brunner's strongest boosters.

SIZES designed to fulfill your customers' needs from the air conditioning of large buildings, to holding meat at sub-zero temperatures, or keeping beverages cool. Sixty-nine air and water cooled models—1/4 hp. to 75 hp.—for single or multiple unit installations.

And a big PLUS... effective field help whenever you want it!

The new illustrated Brunner catalog gives you easy-to-use application data for determining the equipment you need for low cost, high efficiency air conditioning and refrigeration. But that's only part of the story. Why not get details of the Brunner proposition now? Write, wire or phone us today.



BRUNNER MANUFACTURING CO., UTICA 1, NEW YORK, U. S. A.



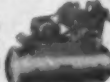
AIR CONDITIONING
Self Contained Units to 10 hp.
For remote installations... Brunner Condensing Units to 75 hp.



REFRIGERATION
Condensing Units from 1/4 hp. to 75 hp. 69 Air and Water Cooled Models.



AIR COMPRESSORS
Single stage 1/4 hp. to 2 hp. Two stage 1 1/2 hp. to 15 hp. Horizontal and Vertical Models.





specialty SELLING METHODS

Summer Cottages Need Refrigerators, So Dealer's Ad Offers High Dollar on Trade-Ins

SYRACUSE, N. Y.—Making a strong bid for new refrigerator business on the basis that it needed a large number of used boxes for summer cottagers, Erie Television Co. employed a striking newspaper ad in which it offered the "Top Buck" on trades.

The ad carried a coupon which the interested person could send in and which would bring a representative of the store to the home, with a trade-in estimate on the old refrigerator. Prospects were invited to either phone or mail in the coupon. Copy read: "Erie will give you top dollar for your old refrigerator. We need 135 used refrigerators for summer bungalow orders. Erie will give you an extra large trade-in allowance if you act now."

Silber Named James V. Pres.

INDEPENDENCE, Kans.—Stanley Silber has been appointed vice president in charge of sales for the James Mfg. Co. here, maker of automatic portable dishwashers. Silber has been general sales manager for the firm.

ERIE
TOP BUCK
ERIE WILL GIVE YOU TOP DOLLAR FOR YOUR OLD REFRIGERATOR. WE NEED 135 USED REFRIGERATORS for Summer Bungalow Orders!
ERIE WILL GIVE YOU AN EXTRA LARGE TRADE-IN ALLOWANCE if you act NOW!
SAVE BY TRADE
NORGE
Do a Read Now 1000
Mail this coupon for a FREE appraisal
or phone 3-3500
2-7043
Today
NO OBLIGATION TO BUY ANYTHING! YOU'LL GET MORE IF YOU ACT NOW!
— OPEN EVENINGS —
ERIE TELEVISION CO.
100 E. Main, Corner 8th—122 N. Sales Phone 3-3500

'Sell the Husband' Psychology Helps Dealer Build Top Appliance Volume

PHILADELPHIA—Appliance dealers who have considered a profitable sale well on its way, only to have it "fall through" when an over-budget-minded husband says he can't afford it, will find the ideal answer in a clever system developed by E. H. Moser here.

Moser, a veteran of two decades of appliance retailing, covers most of the city with a six-man crew of outside salesmen. The firm is a heavy user of newspaper advertising, believes in "using the user" and regularly follows up every tip of any kind turned in. As a result, all of their time giving demonstrations or sales talks to housewives.

This, in turn, has brought about the not-unusual problem, of "getting around the husband" once the housewife has been convinced on a new refrigerator, range, washing machine, or home freezer.

'THE BOSS' CAN GIVE IT A PUSH

Moser learned years ago that often when the salesman falls down on closing a sale, the appearance of "the boss" at the prospect's home will work wonders. Accordingly, no sale which an outside specialty man has gotten under way is considered lost until "the boss has had a crack at it."

Moser thus regularly follows up on dozens of prospects who have been nursed along by the salesman, only to wither away because a husband

drew the pursestrings shut. Moser has realized that selling the husband is quite a different problem than selling the housewife, and therefore, he has set up a clever "closing system."

Where a kitchen appliance is concerned, Moser has developed a standard "clinch." This is to get the husband and wife into the kitchen, seated around the kitchen table, and to bring from his pocket a plastic piggy bank. Having done so, the Philadelphia appliance dealer asks the husband whether he enjoys dining out. Mystified, the husband will usually reply, "yes."

DO YOU TIP YOUR WIFE?

Conversation will usually develop the fact that the family eats out anywhere from once to half a dozen times a week. Moser is then cued to ask, "Do you ever leave the waitress a tip?" At the same time, he slips 35 cents or 25 cents under a plate in the center of the table. This usually rates top attention from the prospect. Invariably, the husband will retort that of course he leaves a tip, and usually of the same amount or more than Moser has placed on the table.

Here the dealer tells him that if he will merely set aside the same amount of money normally expended in tips when eating out, that the amount will pay for the new refrigerator, range, or other appliance intended.

If the husband fails to see the connection, Moser merely points out that it is the same thing as "tipping his wife" for her services. This leads to much merriment and provides the housewife with a powerful bit of leverage to bring the sale about. Moser starts things rolling by saying, "I will make the first payment myself." He slips "the tip" which he has laid out on the table in the piggy bank, which is presented to the husband, and in most cases the sale is completed.

The dealer uses this same plan time and time again in evening calls upon couples with good results. On every such call, he carries along the familiar piggy bank, a pocketful of change, and a small amount of literature on the appliance involved.

HOW MANY SHIRTS DOES AN IRONER COST?

There are many analogies which can be drawn similar to restaurant tips, to impress upon the husband how cheaply appliances may be bought. The price of having shirts done outside, when lumped together and saved in a bank, will readily pay the cost of a sit-down ironer or automatic washer. It is surprising how many husbands have failed to give any thought to the cumulative amount.

In selling home freezers, Moser asks the customer to figure for himself how much he has saved every day in the purchase of large quantities of food at wholesale prices, and place the same amount in the piggy bank until the home freezer is paid for.

Actually moving dimes, quarters, and nickels around on the surface of the table, and stacking up a week's savings from a handful of coins in his pocket, gets results for Moser. It is not unusual for him to place \$20 in quarters and half dollars on the tabletop in the course of a "clinch argument."

Louisville Firm Named Whirlpool Distributor

ST. JOSEPH, Mich.—Appointment of Falls City Supply Co., Inc., Louisville, Ky., as Kentucky and southern Indiana distributor for Whirlpool home laundry equipment was announced by John M. Crouse, Whirlpool sales manager.

The new distributorship is headed by Tony Landenwich, president, and Vic Bloemer, sales manager.

Westinghouse Dealers Get Tie-In 'Packages' For Band Wagon Promotion

MANSFIELD, Ohio—Special package deals on appliance specialties as a merchandising tie-in with the company's \$3,000,000 "Band Wagon" promotion of the national political conventions were announced recently by Westinghouse Electric Appliance Div.

The specials are being offered as traffic builders to help retailers sell the full line of Westinghouse electrical housewares, fans, and vacuum cleaners during this intensive sales drive that starts July 1, said R. M. Oliver, manager of the appliance specialties department.

Appliance specialties will be featured on the Westinghouse-sponsored political convention programs over the CBS radio and television networks.

A package arrangement for fans offers a 10-in. non-oscillating fan at a special price when ordered with two other Westinghouse fans. The fan, model 10LD, which sells regularly at \$12.95, will be offered at retail for \$9.95.

During the promotion period, an "old toaster round-up" will offer a toaster trade-in value of \$5 to be applied on the purchase of a new Westinghouse toaster, model TO-501. This will bring the price of the new toaster, less trade-in, to \$19.65.

A vacuum cleaner package deal includes an upright cleaner, model F-91, with a 7-piece attachment set and a tank cleaner, model T-53, with a 14-piece set of attachments, when ordered with two other vacuum cleaners. Either special will be offered at retail for \$59.95.

As a further aid in promoting the specials, dealers will receive free a 61-piece promotion kit to display the Westinghouse line of appliance specialties. The kit contains everything the dealer needs for window or sales floor display including banners, streamers, and individual product selling tags plus a guide book for advertising at the local level.

FABRICATED TUBULAR PARTS

THIRD OF A SERIES OF ADVERTISEMENTS THAT TELL ABOUT PRODUCTS THAT MEAN MUCH TO THE REFRIGERATION ENGINEER

with ECONOMICAL CONSTRUCTION

Take advantage of Wolverine's specialized skill and experience to provide the fabricated tubular parts

you require. Wolverine's vast knowledge coupled with the necessary special equipment that we have or can design to produce these parts most efficiently, leaves nothing wanting in supplying you tubular parts to meet your exacting demands for quality and economy.

We invite you to consult our Customer Engineering Service which is always ready with a helping hand to work out problems of this nature.

WOLVERINE TUBE DIVISION
Calumet & Hecla Consolidated Copper Company
INCORPORATED
Manufacturers of seamless, nonferrous tubing
1413 Central Ave. • Detroit 9, Mich.

Wolverine Mill Depots:
DETROIT, MICH. • DECATUR, ALA. • HOUSTON, TEXAS • LOS ANGELES, CALIF.
LONG ISLAND CITY, N. Y. • PHILADELPHIA, PA. • PROVIDENCE, R. I. • ST. LOUIS, MO.

Export Department, 13 E. 40th St., New York 16, N. Y.

trade in refrigerators profitably

with the original

"BLUE BOOK"

order your copy today

OFF THE PRESS NOW \$5.00 POSTPAID

NATIONAL REFRIGERATOR MARKET REPORT, INC.
DEPT. AC-1, P.O. BOX 600
LOS ANGELES 25, CALIF.

REMCO DRIERS

STANDARD-DUTY

The lowest-cost, most efficient DRIER on the market.



These are the ideal low-cost standard duty driers—for use by original equipment manufacturers, field installation or service replacement. With new MOLDED Remcal drying element or granular silica gel. Copper bodies 1-5/8" diam. with spun ends. In 1/3 thru 1 H. P. Send for descriptive folder.

REMCO INCORPORATED
ZELIENOPLE, PA.

SALES POSITION AVAILABLE

The General Electric Company has requests from several well established distributors of its commercial packaged air conditioners for capable salesmen to fill well-paying year-round positions in the larger cities. Interview will be arranged locally. Send summary of experience to General Electric Company, Dept. H, Air Conditioning Division, Bloomfield, New Jersey. Replies will be kept in confidence.



LEFT: Host Bill Euth (L.) draws a frozen custard for Glen Hendryk, dairy bar operator from the resort town of New Haven, Mich., who dropped in at a Euth-Lambrecht Co. open house to see the new Taylor freezers. Lyman Harris, Detroit drive-in operator (R.), examines the new Taylor model 77 completely automatic continuous freezer.

Commercial Refrigeration

Just a Quiet Little 'Open House'



RIGHT: While Euth (in apron) tests the temperature of his custard mix, Alcide Signeur, Michigan representative for Taylor (R.), explains how his units maintain the proper temperature levels. Euth-Lambrecht has staged three open houses so far this year to show freezers to the trade and expects to hold more before the summer is out.

Only the Interested Come

Counter Freezer Dealer Finds Inexpensive Demonstration Attracts Active Prospects

By George M. Hanning

DETROIT—To pass the Euth-Lambrecht Co. refrigeration equipment dealership, on the street, you would never know there was an "open house" going on inside, even though you could see the whole display floor at one glance with ease.

There are no gaudy banners, balloons, ribbons, and "splashy" layout. No "carnation in buttonhole" back-slapping greeter at the front door. Only "color" in the whole place is the comic-decorated apron wrapped around the middle of President Bill Euth.

There aren't even any big crowds of people. Just two or three groups of two or three persons each standing around munching on cones of soft ice cream, sherbet, or frozen custard freshly drawn from the two Taylor freezers on display.

There really isn't room for many more. A dozen persons would be an unwieldy throng in the small equipment packed display area.

EVERYTHING'S QUIET, RELAXED, AND BUSINESSLIKE

Everything is quiet, relaxed, and businesslike and that's the way Euth likes it. That is the way he is laying the foundations for what he expects to be a profitable business in counter freezers this year.

Euth-Lambrecht has been in the refrigeration and electrical contracting business for just short of 30 years and handles the Lipman line of condensing units, air conditioners, and refrigerated equipment plus a few other brands of equipment.

Euth took on the Taylor freezer line at the first of the year for the metropolitan Detroit area. Since then he has staged three of these quiet-type "open house" demonstrations for the trade and expects to hold more at frequent intervals through the summer. At these events, he not

only builds up his prospect list, and takes orders for equipment, but also sells the display pieces right off the floor.

Though this type of open house is simplicity itself and inexpensive to put on, it takes a lot of work, Euth notes.

"I started making arrangements for this latest one four weeks in advance," Euth relates. "First thing I did was to get in touch with Alcide Signeur, Taylor's representative in Michigan."

"We picked a date that would be convenient so that both of us could be on hand and far enough in advance so that we would be sure that the equipment ordered from the factory would arrive on time."

ADVERTISED EVENT IN METROPOLITAN PAPER

"Then I arranged for an advertisement to appear in one of the metropolitan newspapers four times over a period of 10 days prior to the open house. I used the metropolitan paper because it covers the territory in which I am franchised and is about the best means available for catching the attention of the people who would be interested in counter freezers."

"The ad was 2 columns wide and 5½ in. deep. It appeared in the business listings of the classified advertising section."

The advertisement was headlined: "Free demonstration of the new Taylor automatic continuous freezer and the famous Twin Taylor. See them in operation on low and high-butter fat mix."

This was followed by the time and place of the open house with directions on how to get there.

The ad also contained a picture of the continuous automatic freezer alongside the statement in large type

"no valves to open or shut."

Below the picture ran this copy:

"The only automatic continuous freezer on the market. Any one can say they have the best. We are willing to show you and have you be the judge. You may operate it if you wish."

Further down was this teaser: "If you are interested in profits from 10 to 20 thousand per year from a small investment, be there."

"People who are interested in ice cream freezers would respond to that ad," Euth figured, "and to those who were not interested, it wouldn't mean anything. It has worked out that way, too. We have had very few people come in who weren't actively interested in counter freezers."

Other than the ad, Euth depended entirely on word-of-mouth advertising to his old customers to bring people out to the open house. He spent a lot of time on this phase of

the promotion.

Next step for Euth was to contact the local dairies to arrange for a supply of the mix. Euth has found the dairies anxious to cooperate in providing mix and a man to help serve it. He selects one that has a good low-butterfat content, because he believes that this type of mix has the greatest appeal to the public and therefore to ice cream stand and drive-in owners.

The low-butterfat mix, he says, is less fattening and also contains more vitamins than the high-butterfat mix.

NO BRAND OF MIX PROMOTED

At the open house, Euth makes no particular effort to promote the brand of mix he is using.

"All brands will work equally well in the freezer," he reasons. "If the prospect asks us what mix we are using, we will tell him. But the dairy

representative is welcome to plug his product all he wants."

The open house was scheduled to run from 10 a.m. to 5 p.m. on a Saturday. This timing, Euth declared, gave him time to completely sterilize the equipment and get an initial batch of mix made up before customers would begin to arrive.

The attraction of the open house has been good, from Euth's standpoint. He said that on one Saturday it rained, and he figured that the demonstration would be pretty much of a washout. But, more than 50 prospects showed up anyway. On good, sunny days, about twice that number turn out.

"Running a series of demonstrations like this," Euth said, "we do get some repeaters, but generally we have attracted new groups each time."

"The demonstrations so far have kept us busy just following up the leads."

Here's why it's needed



Low lube oil pressure... or slow pickup of oil pressure at the start of a cycle... can occur unexpectedly and without warning in any pressure-lubricated compressor. When this happens, damage to seals and bearings may result even in the best of refrigeration compressors. To prevent such costly damage, PENN developed the Series 275 Oil Protection Control with built-in Time Delay Switch.

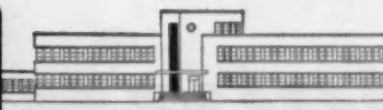
a "MUST" for
pressure-lubricated
REFRIGERATION
COMPRESSORS

Here's how it works

When compressor starts, if the oil pressure does not build up to the proper point within a safe time period, the PENN 275 stops the compressor automatically before damage can occur. If oil pressure drops below a safe minimum during the running cycle... and does not rise to normal within the time delay period... the control stops compressor operation. Thus, the compressor never operates more than the predetermined safe time on subnormal oil pressure. Result? Positive, automatic protection at all times!

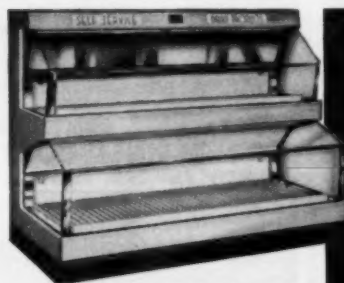
Investigate this new, low-cost protection for refrigeration compressors or for other pressure-lubricated equipment. For complete information ask your compressor manufacturer or wholesaler or write Penn Controls, Inc., Goshen, Indiana. Export Division: 13 E. 40th Street, New York 16, N. Y., U. S. A. In Canada: Penn Controls Limited, Toronto, Ontario.

PENN



AUTOMATIC CONTROLS

FOR HEATING, REFRIGERATION, AIR CONDITIONING, PUMPS, AIR COMPRESSORS, ENGINES, GAS RANGES



A self-service dairy case that SPEAKS YOUR LANGUAGE... sales success! And ANSWERS THE MERCHANT'S NEEDS... with storage for staple dairy products below... quick turnover for high profit perishables above. Its gleaming beauty calls shoppers to "come see." And they are tempted to BUY, because impulse perishables get top billing on the eye-level upper shelf. That's why this compact display is WORTH REPEATING... with any number set in continuous arrangement. That's why you can sell it again... and AGAIN!

WRITE FOR THE PROFITABLE KOCH DEALER PROPOSITION

KOCH

refrigerators, inc.
NORTH KANSAS CITY 16, MO.

SPEAKS
FOR
ITSELF!

FEATURES THAT MAKE MODEL 206 A NATURAL REPEATER

Compact 6 ft. length two shelves deep
Exterior front of white porcelain and stainless steel
All welded steel construction, heavily insulated with glass fiber
Front bumper guards against cart damage

designed
for your
need

RUDY CONDENSERS

Any type... brazed... crimped... clean... tight... highest quality... prompt service... low cost.

WRITE FOR DETAILS

RUDY Manufacturing Co.

Specialists in
Manufacturing Evaporators and Condensers
DOWAGIAC, MICHIGAN

MORE INFORMATION?

Use Handy Coupon
on "What's New" Page
of this issue.

HOUSEHOLD REFRIGERATION

Appliance Makers Plan Displays for National Homefurnishings Show

NEW YORK CITY—A number of appliance manufacturers are among the companies which have already contracted for display space at the National Homefurnishings Show to be held in Grand Central Palace here Sept. 18-28.

These manufacturers include American Kitchens, Bendix, and Crosley Divisions, Avco Mfg. Corp.; Blackstone Corp.; Chambers Range Corp.; Estate Stove Co.; Geneva Modern Kitchens, Inc.; Hobart Mfg. Co.; Morton Mfg. Co.; Nash-Kelvinator Corp.; and Whirlpool Corp.

B. Robert Elton, president and director, said the show promises to be record-breaking both as to attendance and the number of exhibitors. The event is intended to give the consumer an opportunity to view new designs in furniture, fabrics, carpeting, decorative accessories, and allied home lines.

Dates of this fourth annual exhibit coincide with the national promotion of "Home Fashion Time for 1952" throughout the country. Last year's merchandising plan offered to stores over the nation—a kit tying together Home Fashion Time with the show—is being repeated this year.

Lackawanna Assn. Adopts Emblem To Aid Consumer

SCRANTON, Pa. — The Lackawanna County Appliance, Radio & Television Association has adopted an official emblem which is being displayed by all association members.

The association is affiliated with and is endorsed by the Scranton Better Business Bureau.

In informing the public of its new emblem, the association said:

"When you buy or have repaired or installed a radio, television set or any appliance, select a dealer who displays the above emblem. It's your assurance of a fair and honest transaction. It signifies that the dealer displaying it is a member of this organization."

"He is pledged to abide by and uphold the fine standards adopted by this organization. You can feel confident, when you patronize any of these dealers, that you will receive the best value possible for your money."

Redding Joins Amana

NEW YORK CITY—C. T. Redding, who has been eastern regional sales manager for Deepfreeze Div., Motor Products Corp., was recently appointed to a sales position by Amana Refrigeration, Inc., it was reported here.

Traffic Stopper! Appliances In Mid-Air



REFRIGERATORS AND RANGES apparently supported only by lightweight campboard canopy caused a lot of shoppers to stare at the Homemakers Shop in Waco, Texas. Dealer Ollie Smith uses guy wires, which are almost invisible, to actually support the weight.

Trade-Ins Can Help Close a Sale, Avoid Price Cutting, Small Town Dealer Finds

GALION, Ohio — Refrigerator trade-ins a problem? Not to R. E. Cook of Galion Appliance Co. here who has found, in fact, that trade-ins can be a real help in closing a sale if handled properly.

Moreover, Cook believes that over the period of 17 years he has been in the appliance business here, he has shown a substantial profit on the traded-in refrigerators that he has resold.

There may be some factors in a smaller community that make trade-ins less of a problem than they seemingly are in metropolitan communities. Possibly there isn't so much "sharp trading" on the part of buyers. What seems a certainty is that the people in the smaller communities apparently take better care of their refrigerators than do people in larger communities, and consequently the used jobs are "clean" and tend to command a better market and better prices.

"I almost prefer to work on a deal in which a trade-in is involved because it gets away from the problem of having to struggle with the prospect who wants you to 'knock off a little' on the established price," Cook declares.

"If the customer has a trade-in to offer, you bargain around on the price that you're going to give him on the trade, rather than getting into the matter of cutting the price which is set on the model he wants."

"In most cases we can generally go above what the customer secretly thinks his old refrigerator is worth, because we know from experience about at what price his old unit will move."

"This has a good effect in many ways. It keeps you away from 'price-cutting' and many customers shy from stores that are always running cut-price sales. And it makes the customer feel that he has made a good bargain if he gets what seems to be a good price for his old box."

However, to handle trade-ins profitably, Cook says that the dealer has to know enough to be able to appraise used refrigerator values properly, and to understand something about merchandising them.

"You have to know what makes of refrigerators stand up the best, and which names command the most respect among buyers," he says. "Good makes and models that are 10 years old will sometimes be worth more than not-so-old boxes that were not too well made or well known."

"The makes of refrigerators which are prominent today are of more value and will get a higher price when you resell them as trade-ins than will the 'orphan' makes or 'little-known' makes. The public appreciates this point and you can make a talking point out of it in bargaining over trade-in prices."

Who buys used refrigerators in a small community? There are, of course, the buyers whose income doesn't permit them to afford other than a used model, and they are prospects in all sizes of communities. If there is one "special" type of used refrigerator buyer in a small community, Cook thinks it is the "I'm not going to be here for too long" type of person who, when he comes to the community, hasn't much expectancy of staying too long a time and doesn't want to invest too heavily in home furnishings.

"These people are renters, rather than buyers of homes, and you can spot them by their approach. I've sold used refrigerators to four dif-

ferent people who have lived in the same apartment. In some cases these 'transient' types of buyers have sold the used refrigerators back to me when they were moving and I've sold them over again and realized another profit on the box."

In promoting the sale of used merchandise in a tangible way, Cook relies almost solely on the classified advertising columns.

"That's where people by custom and experience have learned to look for the advertising of used merchandise, so that's where we run our ads," Cook says.

The extent of his classified ad in a particular issue will depend on the market conditions, the time of year, and the amount of merchandise he has to move. When he has a pretty big stock and feels the time is ripe to move some of the trade-ins, the advertisement may be several inches in length and start off with some big type or a headline, so that it looks like a display advertisement.

Consistency in this sort of advertising is important, Cook thinks, as part of the build-up which makes his particular store known as the store "where there's a good selection of trade-ins."

Cook doesn't fuss much with reconditioning refrigerator trade-ins that aren't in good operating condition. In this respect his problem may differ from that of the big city dealer for two reasons:

1. People in smaller communities are generally more careful of their appliances than big city dwellers, and therefore the products aren't abused and are taken care of nicely.
2. Since "reconditioning" isn't generally practiced in small communities, people aren't offered—and don't expect to get—very much for a model that isn't operating properly, and therefore trade it in to be junked, and accept a token or nominal price.

Water cooler prospects will listen, and buy, if it's...

KELVINATOR with the "POLARSPHERE"

Factories, offices, stores! Markets for easy, quick sales! All business men KNOW Kelvinator, the 38-year leader in electric refrigeration!

Only Kelvinator Water Coolers have the hermetically sealed Polarsphere Power Unit. Millions in use! Also... the Pre-Cooler, that almost doubles available cooled water... the spurtless, feather-touch dial... the 5-year warranty! A complete line of Kelvinator Water Coolers... bottle or pressure type, hand or foot operated, cold storage compartments if desired.

National Advertising... for YOU!



Your best prospects read powerful Kelvinator Water Cooler advertising in NEWSWEEK, U. S. NEWS and BUSINESS WEEK. They are asked to call you! That helps you to make quicker sales, bigger profits!

It's Easy To Start Selling Kelvinator!

Just call your local Kelvinator Distributor... he's listed in your telephone directory. Or write to... Kelvinator Water Coolers, 108 Lucas Street, Columbus 8, Ohio, for complete Dealer Information!

THERE IS A BETTER WATER COOLER...

IT'S Kelvinator

The Most Valuable Franchise in the Appliance Industry



ACE CABINET CORP.
NEW BEDFORD, MASS.
Executive Office
1457 Broadway New York 18, N. Y.
Specialists in
LOW TEMPERATURE EQUIPMENT

trade in
refrigerators
profitably
with the original
"BLUE BOOK"
order your
copy today
OFF THE PRESS
NOW
\$5.00
NATIONAL REFRIGERATOR
MARKET REPORT, INC.
DEPT. AC-1, P.O. BOX 88
LOS ANGELES 28, CALIF.

Deepfreeze

(Deepfreeze home freezer specifications arrived too late for inclusion in the Special Freezer Issue. They are presented here to complete the group.)

Deepfreeze Appliance Div., Motor Products Corp., North Chicago, Ill.

Model No.	B72	C72	B13	C13	C17	C23
Chest or upright type	Chest	Chest	Chest	Chest	Chest	Chest
Separate freezing section?	No	No	Yes	Yes	No	Yes
DIMENSIONS (In Inches)						
Interior: Height	21 1/2	21 1/2	16 1/2	16 1/2	21 1/2	16 1/2
Width	30 1/2	30 1/2	17 1/2	17 1/2	30 1/2	17 1/2
Depth	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2
Exterior: Height	37	37	37	37	37	37
Width	38	38	38	38	38	38
Depth	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2
CAPACITY (In Cu. Ft.)						
Freezing compartment	—	—	3.16	3.16	—	3.16
Storage compartment	7.22	7.22	9.68	9.68	16.85	19.35
INTERIOR EQUIPMENT						
Partitions (No.)	2	2	2	2	4	4
Baskets (No.)	—	2	—	2	2	2
Light	Yes	Yes	Yes	Yes	Yes	Yes
INSULATION						
Kind	Mineral Wool					
Thickness (In Inches)						
Top	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2
Sides	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2
Bottom	4	4	4	4	4	4
LIDS						
Number	1	1	1	1	2	2
Lid support	Yes	Yes	Yes	Yes	Yes	Yes
Provision for locking?	Yes	Yes	Yes	Yes	Yes	Yes
WEIGHT (Lbs.)						
Net (6BS)	260	260	360	360	460	620
Shipping (6BS)	290	290	400	400	510	680
PRICE, suggested retail	\$279.95	\$299.95	\$419.95	\$469.95	\$569.95	\$639.95

*Small compartment. †Large compartment.

REFRIGERATION EQUIPMENT

Cooling medium.....Wrap around
Refrigerated surface area
(sq. ft.).....Models B72, C72, 14.2;
models B13 and C13, 20.4;
model C17, 33.4; model C23, 39.6
Compressor:
Make.....Tecumseh
Sealed or open.....Sealed
Location in cabinet.....Base
Refrigerant.....Models C17 and
C23, "Freon-22"; all others, "F-12"
Make of control.....Ranco or
Cutler-Hammer
Accessible for user
adjustment?.....Yes
Location.....Models B72 and
B13, rear; all others, front
Condenser
Forced or natural convection. Model
C23, forced; all others, natural

Warning device.....Light in models
C72, C13, C17, and C23

CONSTRUCTION AND FINISH OF

Cabinet.....20 gauge welded steel,
baked-on enamel
Interior liner.....20 gauge welded
steel, baked-on enamel
Materials in evaporator.....Steel and
copper tubing

PROTECTION PLAN

Warranty.....Standard one year
on freezer; additional four years
on compressor
Food insurance offered?.....No

SPECIAL FEATURES

Static shell condenser on models
B72, C72, B13, C13, and C17. New
spring type hinge mercury light,
switch in cabinets. One piece cabinet
base, menu makers, and handy baskets
on C13 and C23 models.

'Freez-R-Pak' Kit Offer Renewed by Ben-Hur

MILWAUKEE, Wis.—Repeating a
merchandising offer used with out-
standing success last year, Ben-Hur
Mfg. Co., manufacturer of Ben-Hur
farm and home freezers, recently an-
nounced a new "Freez-R-Pak" offer
to be promoted by Ben-Hur dealers.
The new Ben-Hur "Freez-R-Pak"
kit, according to R. C. Graves, Ben-
Hur sales manager, has a retail
value of \$25.95. It will be offered by
dealers in combination with the pur-
chase of any of the four models of
Ben-Hur freezers.

The kit contains equipment and
packaging materials sufficient for a
whole season's needs of several hun-
dred pounds of frozen foods. Much
of the packaging is reusable, and all
is nationally advertised.

Included in the kit are: one Ben-
Hur 8-qt. aluminum blancher (by
Regal), a dozen quart-size and a
dozen pint-size Freezette polyethyl-
ene containers, 15 pint-size and 10
quart-size Marathon Freezette pack-
ages, a 60-ft. roll of Marathon "Tite"
laminated one-wrap locker paper, 36
Ben-Hur Laminet plastic bags in as-
sorted sizes, 3 rolls of Mystik freezer
tape in three colors, an automatic
marking pencil and a dozen refills,
and a plastic defroster paddle.

E. J. Burnett Appointed To Revco Engineering Staff

DEERFIELD, Mich.—Appointment
of E. J. Burnett to the engineering
staff of Revco, Inc., manufacturer of
Chill Chest food freezers, was an-
nounced by H. D. White, vice presi-
dent in charge of engineering.

Prior to joining Revco, Burnett
was with Hubbell Metals, Inc., of St.
Louis, and Franklin Transformer
Mfg. Co. of St. Cloud, Minn.



Evaluator Card Tells How Much Freezer Saves



NORTH CHICAGO, Ill. — Among
the questions most often asked of
home freezer salesmen are: How
much do they cost and how much
do I save if I buy one? Deepfreeze
Appliance Div. of Motor Products
Corp. has come up with a selling de-
vice which answers both questions
quickly and accurately.

The device is the Deepfreeze
"Evaluator Card," a vest-pocket-
sized "gimmick" that operates like a
slide rule and is based upon a
family's average monthly expendi-
ture for food.

If a family spends an average of
\$100 monthly for food and the sales-
man wants to show how much sav-
ing can be realized through the pur-
chase of a Deepfreeze home freezer,
the sliding indicator is set at \$100

and a \$213.60 annual saving on food
is shown in a small window. Also
shown is the freezer size recom-
mended for a family whose expendi-
tures for food averages \$100 each
month.

The evaluator card is the result of
extensive research by leading home
economists who have established that
nearly 80% of food purchases are in
the perishable category and who
prove conclusively that quantity buy-
ing, spoilage, waste, and transporta-
tion all have a decided bearing on
food costs over a period of time. All
this information is accurately pre-
sented on the evaluator card.

On the reverse side of the card is
a complete listing of Deepfreeze
home freezer models, their equip-
ment, and delivered retail cost.

WHO SOLD THE REFRIGERATION?

A gripping tale of suspense... and profits... as told by **METE R. MATIC**

ON ONE HAND —

I was no different than other dealers. I, too, had refrigeration units on hand that had to be sold.

ON THE OTHER HAND —

Prospects told us: "We need new refrigeration, but how can we buy it?"

THEN... ONE DAY IT HAPPENED —

Mr. M. T. Pockets... considered to be the toughest of all to sell... finally bought the unit he needed. Dealers all over town asked: "Who sold Mr. T. Pockets — and HOW?"

AND NOW...

Mr. M. T. Pockets and I are good friends. He wants to buy another unit next month. All I have to do is make a quick change of meter timing gears, increasing the daily payment to include the new unit.

There are no lump sum monthly payments. All he has to do is drop a few quarters a day into the meter... and I am assured of getting my money each month.

Installation of the Meter-Matic coin meter was very simple. It took just a few minutes to hook-up the meter.

The moral of the story is:

If you want to sell more refrigeration, sell on the

METER-MATIC

SALES PLAN

Customer deposits quarters daily. If he doesn't... the meter will stop the flow of current to his refrigeration unit.

Now Mr. Mete R. Matic hits the jackpot every month.

Model DM-6 Double Door

METER-MATIC METERS ARE —

- Accurate and Dependable.
- Low in Price.
- Fully Guaranteed.

GET THE DETAILS TODAY

INTERNATIONAL REGISTER COMPANY
2436 West Washington Boulevard, Chicago 12, Illinois

Send me Meter-Matic Sales Kit No. 62-R. Be sure to include a copy of the "1952 Survey" giving vital statistics on the use of the meter plan by other dealers.

Company _____
My Name _____
Address _____
City _____ State _____

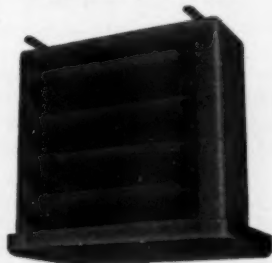
WANTED ENGINEERS

Experienced household refriger-
ator or freezer design engi-
neers. Unusual opportunities
for advancement with a sound
and growing company, located
20 miles from Cedar Rapids,
Iowa, in a fine area for family
living.

Engineering Department
AMANA REFRIGERATION, INC.
AMANA, IOWA

LOOK to LARKIN

for Good Looks



LARKIN HUMI-TEMP UNIT

For clean, smart lines, satin-smooth
finish, color and overall good
looks—Larkin leads. Behind this
beauty is the quality and perform-
ance that keeps Larkin ahead.

Manufacturers of the original Cross-Fin
Coil — Humi-Temp Units — Evaporative
and Air Cooled Condensers — Air
Conditioning Units and Coils — Direct Ex-
pansion Water Coolers — Steel Vacuum
Plate Coils — Heat Exchangers.

WATCHDOG OF THE NATION'S FOOD SUPPLY

LARKIN COILS

210 MONROIE RD., S.E. • ATLANTA, GA.

They'll Do It Every Time By Jimmy Hatlo



Do You Have 'Both Feet On The Ground'?

Recipe for successful room air conditioner sales

Take one prospect

Stir with the Carrier Buyer's Guide

Fold in the comfort of a Carrier Room Air Conditioner

And keep an order pad handy



air conditioning • refrigeration

For 50 years—the people who know air conditioning best



THE 1952 CARRIER HUMIDRY

—with outstanding features that make it easy to use...to operate...to sell!

► Prospects become purchasers when they're shown what a good room air conditioner should do — and how Carrier does it best. Show them quickly, convincingly with the Carrier Buyer's Guide.

As you turn the pages, demonstrate the features on the unit. The new display stand makes it easy to do. Interest aroused—you can talk about terms... and take the order.

Start using the Carrier Buyer's Guide on your room air conditioner prospects today. Carrier Corporation, Syracuse, New York.

AN INTERNATIONAL INSTITUTION • SUBSCRIBERS ALL OVER THE WORLD

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U. S. Patent Office
Est. 1908



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Member, Audit Bureau of Circulations. Member, Associated Business Papers.

VOLUME 66, No. 6, SERIAL No. 1,212, JUNE 9, 1952

"I have always felt that whatever the Divine Providence permitted to occur I was not too proud to report. The people are not served by pussyfooting, or by that sort of journalism in which nobody will ask who is the editor of a paper or the writer of an article, and nobody will care."—Charles A. Dana.

Answering Price Objections

TWO major reasons cause a prospect to quibble about the price of the product you are selling.

1. He is not convinced that the product is worth what you ask for it.

2. He thinks he can get the same product somewhere else for less.

The answer to both of these objections lies in one word: Salesmanship.

If, after you finish your sales presentation, your prospect says: "It's too much and I will not pay that high a price," you haven't told a convincing story.

When you have hit upon the prospect's real need for your product, it's difficult to stop him from buying—no matter what your price.

Possibly that doesn't sound logical. But neither are the buyer's desires. When he wants something, he wants it regardless of price.

The writer knows a young man who recently spent a whole month moving heaven and earth to raise enough money to meet the down payment on a flashy automobile.

He wanted that car more than he wanted anything else. He was convinced that if he did not buy it right away, he would be losing money. He was willing to go far into debt to get the new joy buggy.

Admittedly, that is an extreme case. But it isn't extraordinary. The salesman had convinced him beyond all reason that he needed that car more than he needed money.

This was a salesman—no order taker. He was fighting in a tough market. Other salesmen told themselves: Credit controls are tough. Prices are too high for luxuries.

However, this salesman sold his product as a girl-catcher to this particular customer, and earned his commission.

Your product doesn't have to have a cheaper price tag than all others, but it must promise, through you, to give him value received.

What about the other guy who sells your product for less?

You know that the customer expects certain services from you when he buys the product. If your price is fair, you know that your competitor must be cutting corners somewhere to sell at a cheaper price.

Take the experience of another friend of ours. He grabbed the bait when the salesman chopped \$20 off the price of storm windows and doors. "Why not?" he thought. "All storm windows and doors seem to be very much alike. This man tells me his have all the features of the others."

Shortly after the installation our friend was disillusioned. There was a safety feature missing here, and an inferior spring there. They were items that the salesman apparently hoped wouldn't be missed—or at least the customer wouldn't complain about.

However, our friend did notice and he did complain. He considers that he lost more than his \$20 "savings" in the trouble and extra effort he had to go to get what was originally promised him.

In the future, the salesman who maintains his price and offers certain services for that price will not have too much difficulty convincing this fellow that he will be getting more value from him than he would from the price cutter.

Trusted salesmen can convince the customer that the services they offer are worth more than the few dollars he can save by buying from a short-change competitor. It may not be as hard as you think.

SUPERMARKET SURVEY

Commercial Refrigeration

85% of Their Sales Are Self-Serve; All Handle Frozen Foods; SMI Sales Rise 21%

CLEVELAND—Frozen foods are carried by every supermarket. About 85% of supermarket sales are made by the self-service method. As many new markets were built in 1951 as in 1950. An equal number will be built in 1952.

These were a few results of a survey made of its members by Super Market Institute and presented during the group's 15th annual meeting here by Curt Kornblau, manager of the institute's research and information service.

The survey included data from 316 of the 560 member companies and represented 3,930 stores out of a total of some 4,500.

"The SMI members registered an average sales gain of 21% over 1950," Kornblau said. "This increase is the highest recorded in any of the four annual surveys to date."

"Nearly nine out of 10 members (89%) enjoyed sales increases, 10% had sales declines, and 1% reported no change. Again, this is the best sales performance recorded to date. Every company with sales above \$6 million in 1950 gained volume in 1951."

The overwhelming majority of operators had sales increases in every department: 87% gained in the produce department, 90% in the meat department, and 93% in the "grocery and other" departments. The rate of sales increases for all companies combined was higher in the meat and produce departments—22%—than in the "grocery and other" departments where the gain was 20%.

Gross Margins Show

Downward Trend

"Comparison of gross margins in 1951 and 1950 shows a decided downward trend," Kornblau stated. "Three out of four companies operated on a lower over-all gross margin, 22% reported a higher gross margin, and 3% the same as in the year before."

"The slump in gross margins extended to all departments, including the produce department where prices were controlled not by OPS but by competition."

"The meat department was hit hardest, as 85% of the companies had lower gross margins than in the previous year. In the grocery department, 74% of the companies had a decline in gross margin. In the produce department, 47% of the members lowered their gross margin."

As for expansion, the survey showed that "of all the supermarkets operated by the SMI members at the time of the survey (January, 1952), nearly half (46%) were either built new (28%) or extensively remodeled (18%) in the past two years."

"Although the members were unable to execute all their expansion plans in 1951, a very substantial number of new supermarkets were erected and many older markets remodeled. The number of new supermarkets built in 1951 was about the same as in 1950, and the number of major remodelings exceeded the 1950 total. The rate of expansion declined from the 1950 rate."

56% Expanded During 1951 Despite Restrictions

"Despite building restrictions, material shortages, manpower scarcity, high construction costs, and general uncertain conditions, over half of the members (56%) expanded during 1951—the same percentage as in 1950. Some 39% of the companies engaged in new construction and relocations, and 34% carried out major remodeling jobs (17% did both)."

"The supermarkets constructed in 1951 represent 14% of all supers in operation at the end of the year; 9% of the supermarkets underwent major renovation during the year."

"As in previous years," Kornblau said, "the percentage of companies which engaged in expansion was higher among the larger companies, but the smaller companies had a greater rate of expansion."

"The greatest expansion activity took place in the West South Central and Southeast regions. New England had the lowest rate of building and remodeling. Operators in every region except the West North Central and Southeast did more new building than remodeling. The smaller companies stress remodeling rather than new construction. Only one out of five new supers (21%) was a relocation, the lowest percentage on record."

"Caught in the squeeze between

lower gross margins and rising operating expenses, supermarket operators will continue to expand in the quest for more volume. The 'definite plans' for expansion in 1952, as far as the members could tell in January, call for the construction of about the same number of new supermarkets as in 1951 but fewer major remodelings."

"Projecting the expansion plans of the entire membership, the SMI member companies are planning to erect about 525 new supermarkets and to extensively renovate about 275 supers during the year."

"Practically the same proportion of companies (55%) is planning to expand this year as did last year (56%). The new supermarkets blueprinted for 1952 will make up 14% of the total supers operated by the SMI members as of January, 1952. One out of every five new supers will be a relocation. Major remodelings will take place in 7%."

"At the time of the survey, a sizable portion of the 1952 expansion program was already under construction—42% of the new supers and 33% of the remodelings."

"If plans are realized, companies with sales of \$5 million or less will again have the greatest rate of expansion. In fact, they are planning to step up their expansion activity above the 1951 level. Regionally, only

the New England and West North Central regions have drafted plans bigger than their 1951 expansion program."

"Two new supers are planned for every major remodeling. Operators in all size groups and in all regions (except New England) have mapped more new buildings than remodelings for 1952."

"One out of every four supermarket is already completely self-service in all four major departments (grocery, meat, produce, and dairy). A year ago, 19% of the SMI member supers were fully self-service."

Wide Regional Variations In Self-Service

"There are wide regional variations in the progress of self-service. The West South Central region leads the way with 66% of the supermarkets fully self-service, followed by the Mountain-Pacific states with 45%. Over half of the supers with complete self-service are located west of the Mississippi River."

"It may be estimated that about 85% of supermarket sales are made by the self-service method. All grocery departments are completely self-service, as are most of the dairy departments (87%). The majority of produce departments (53%) are on a partial self-service basis, and 43% are fully self-service."

"Half of the SMI member supermarkets (49%) now have complete self-service in their meat departments and another 23% have partial self-service. Only 28% of the meat departments are still on a service basis. Of the new supers erected in 1951, three-quarters (74%) opened with their meat department com-

pletely self-service, and 16% with partial self-service."

"With self-service so firmly entrenched in the perishable departments, virtually all SMI members (96%) do some pre-packaging in their supermarkets. Cheese is pre-packaged in 80% of the supermarkets, meat cold cuts in 76%, fresh meats in 60%, and fresh fruits and vegetables in 50%."

"Every supermarket has the four major food departments: grocery, meat, produce, and dairy."

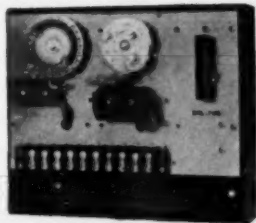
"Separate delicatessen departments are included in 59% of the supermarkets. Four out of five (79%) are completely self-service and another 8% partially self-service."

"Complete bakery departments were reported for 49% of the supermarkets. Of these, about half (48%) are on complete self-service; a somewhat smaller number, 43%, are service; and the remaining 9% are partially self-service."

"Frozen foods are carried in every single supermarket participating in this study," Kornblau reported. "One-sixth of the companies (17%) do their own warehousing of frozen foods, compared with roughly half of the members doing their own central warehousing of grocery products. The 17% of the companies operate 47% of all the SMI member supermarkets. The great majority (81%) which warehouse frozen foods deliver only full cases to their stores."

"There has been much interest recently in a second or 'B' grade. This survey discloses that a 'B' line is offered in 38% of the SMI member supermarkets, by 41% of the companies. Nearly one out of four (23%) of the supermarkets which carry a 'B' line display it in separate cases."

PARAGON DEFROSTING TIME SWITCHES



CHRONO-SPRAY Defrosting Control For Water-Spray Defrosting IT'S FAIL-SAFE!

- A completely flexible defrosting control for Locker Plants, Breweries, Dairies, Walk-in Boxes, Unit Coolers, Air Conditioning.
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- "Fail-safe" feature prevents possibility of evaporator fans running while unit is being defrosted. Complete flexibility with utmost simplicity.

Paragon 300 Series For All Types of Commercial Defrosting:

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An accurate, durable, precision-built time switch for all types of commercial defrosting applications where defrost is two hours or less. Easy-to-set pin-type dial. Heavy hinged case, unbreakable door glass. Also made in heavy-duty outdoor type. Series 330.



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Glowing with buy appeal!



SCHAEFER, INC. MINNEAPOLIS

MANUFACTURERS OF SCHAEFER FROZEN FOOD AND ICE CREAM CABINETS AND PAK-A-WAY HOME FREEZERS Low Temperature Cabinets exclusively since 1929

The NEW
SCHAEFER
Frozen Food
Merchandising
Cabinets with

Glowing
SUPERSTRUCTURES

- ★ Lower cost per cubic foot.
- ★ Extremely low operating cost.
- ★ Wide open top. Runs full length.
- ★ Portable. Usable anywhere in store.
- ★ Self lighted Glowing superstructure.
- ★ Brilliantly lighted inside and out.
- ★ Designed and built especially for frozen foods.
- ★ Refrigerated partitions spaced to fit all frozen food packages.
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- ★ Product price strip channel runs full length.
- ★ Pull out condensing unit. Hermetically sealed. Requires no oil.
- ★ "Keep cold" glass baffle plate for clear vision on Glass Front model.
- ★ Nite cover for protection and economy.

Exclusively for Frozen Foods!

What's New

When requesting further information on new products, please use "Information Center" form.

Clock Defroster Defrosts Twice Every 24 Hours



KEY NO. B-620

NEW ALBANY, Ind.—A new automatic clock defroster that defrosts the refrigerator twice in each 24 hours has been introduced by the H. M. Switzer Mfg. Co. here.

Called the Geneva Clock-Defroster, the unit is available in five different colors: white, ivory, yellow, red, and green.

The company claims that by defrosting twice daily, the defrosting

time is shorter, the inside temperature of the refrigerator remains lower, the compressor runs less often, and foods stay fresh longer.

"Frost accumulating on refrigerator coils has a great affinity for itself," the company notes. "The more it accumulates, the faster it accumulates. Therefore, more frost will collect in a second 12-hour period than in the first 12-hour period."

"The water resulting from the slight film of frost when defrosted will amount to only several teaspoons daily. The water will freeze in the tray and can be emptied once or twice a month. In the event the tray is used for food storage, the food can be covered with wax paper."

Packed in the carton with each defroster are directions for attaching the defroster as well as a recommendation for setting the defroster control level for the various size refrigerators.

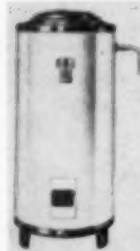
"With a few days' experience," the company says, "it can easily be determined whether the defrosting time should remain at the recommended position or the defrosting time increased in order to obtain the best efficiency."

Recommended retail price for the clock-defroster is \$12.95, the company said.

Portable Water Heaters Feature New Vapor Seal

KEY NO. B-621

KANKAKEE, Ill.—New models of the "Permaglas" portable electric dairy water heaters have gone into production at the A. O. Smith Corp. Kankakee Works.



A major new feature is a specially designed rubber double-locked vapor seal between the inside tank and the jacket, the company said.

"The weight of water in the tank compresses the rubber and improves the seal to give positive assurance that water spilled in filling the heater cannot find its way inside the jacket to the thermostat or heating element," it was explained. "In field tests, no cases of moisture penetration were experienced."

Other changes include a new-type "S" cord assuring longer cord life, and a change in base design from four to three legs to minimize leveling problems.

Principle feature of A. O. Smith portable electric dairy water heaters is an inner tank surfaced with glass to prevent corrosion. The heaters are for use in the milk house, farm kitchen, summer cottage, laundry, rural store, service station, hunting lodge, or trailer.

'Garbridder' Handles Up to Ton of Waste Hourly



KEY NO. B-622

COLUMBUS, Ohio—From 1,000 to 2,000 lbs. of waste an hour can be handled by its "Garbridder" food waste disposal unit for commercial eating establishments, according to Jeffrey Mfg. Co. here.

The heavy-duty machine is designed to dispose of all soft waste, bones, shells, fish waste, and such paper products as bottle caps, napkins, and doilies.

Powered by a 5-hp. motor, the unit is built of rugged grey iron. Inside of the mill is lined with steel. The rotor is made of steel and the knives of high carbon steel. The hopper is of stainless steel.

The Garbridder "utilizes water pressure to effect the most efficient operation," the company explained. "Water is sprayed into the mill at the point where the waste enters, thus wetting the material and forcing it into the mill. At the bottom of the mill on both sides, there are more water jets which force the flowing liquid from the mill into the sewer at an accelerated rate."

Even with high utility rates, cost of operation is small, the manufacturer claims.

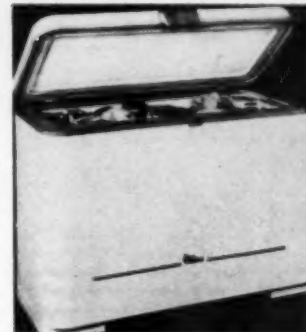
"The unit will use approximately 12 to 15 gals. of water per minute," it was stated. "A restaurant grossing about \$400,000 per year can dispose of all waste in approximately 90 minutes in a 24-hour period. Therefore, the unit runs an average of 2½ minutes per hour."

The machine is claimed to cut

costs for food operators by doing away with the need for garbage storage space and cans, and in labor charges; to eliminate waste by permitting the recovery of flat silver and by making possible a close inspection of food-stuffs thrown away; and to banish the chief source of rats and flies in and about kitchens.

For disposal of supermarket waste, the company has a model 500 conveyor for attachment to any Series G-126-A Garbridder.

King Freezer Features Narrow Depth, Toe Space



KEY NO. B-623

GLENDAL, L. I., N. Y.—A 9-cu. ft. home freezer that will hold about 315 lbs. of food and is narrow enough to pass through almost any door has been announced by the King Refrigerator Co. here.

Called the King 95B freezer, the chest type unit measures 51 in. wide by 37 in. high by 28½ in. deep, including chrome handle with built-in lock. The box is built to hold 0° F. at the normal control setting and -10° F. at the coldest position.

The cabinet is made of heavy gauge steel completely welded. It is finished in two coats of white du Pont Dulux enamel. The inner liner is of the same construction and finish. Insulation is high density glass fiber.

Toe space is provided at the bottom front of the chest and two rust-resistant removable baskets are included. Lid has counterbalanced hinges and live rubber gasket. Compressor is a ½-hp. Tecumseh sealed unit.

which feature

WILL HELP YOU SWING THE SALE...

SPARKLING GLASS FRONT

EXCLUSIVE NEW LID

ROOMY INTERIOR

SMART-LOOKING CABINET



MODEL SS-5310-D with superstructure. Also available without superstructure.

• The SPARKLING GLASS FRONT Watch how the Quadruple Thermopane glass front on this new BTC Display Case appeals to every prospect! It's a traffic-stopper that can't be beat for building frozen food volume.

• The EXCLUSIVE NEW LID Only the BTC Glass Front Display Case offers this convenient, new "Hide-A-Way" Lid. It's self-contained and fully insulated—slides under the rear deck, out of sight, when the cabinet is opened.

• The ROOMY INTERIOR There's plenty of room inside this new BTC Glass Front Display Case—it actually has a full 10-cubic foot capacity! Equally important to prospects, it fits a floor area only 53" x 30".

• The SMART-LOOKING CABINET No ignoring the beauty of BTC's handsome Glass Front Display Case with brilliant, fluorescent-lighted interior—gleaming white enamel finish—and full-color three-dimensional picture!

All of these BTC features are powerful selling points—so be familiar with them. Write Brewer-Titchener today to learn full details on the new Glass Front Display Case. And be sure to ask about the highly profitable BTC franchise.



SELF-SERVICE SALESMAN

That's this BTC 16 Cubic Foot Display Case (Model DC-16). Comes with or without superstructure.

Information Center

For more information on What's New products, current literature and catalogs available, equipment advertised in AIR CONDITIONING & REFRIGERATION NEWS use Key Numbers where designated or specify products advertised and we'll see that you receive this information promptly.

What's New or Current Literature Available

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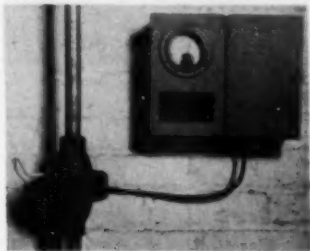
DISPLAY **BTC** CASES

The **BREWER-TITCHENER** Corporation

BINGHAMTON • NEW YORK

What's New (Cont.)

'Hydrotron' Designed To End Scale In Coil Assemblies



KEY NO. B-624

JERSEY CITY, N. J.—"Hydrotron," a new water treatment process and equipment eliminates scale in heat exchange equipment by changing water electro-physically, the Heller Laboratories here has announced.

With Hydrotron, minerals contained in the water crystallize out in the form of a sludge or slurry and do not form a dense hard coating over heat exchange surfaces, the manufacturer stated.

The sludge formed can be removed by the usual methods of blowdown. This process is suitable for treatment of fresh or salt water.

This new electrical water treatment process and equipment has been used widely and with complete success in Great Britain since World War II, the company said. It is known there as "Aquatstat." It was

introduced into the United States in 1948.

The Hydrotron process eliminates the need for a water softener or chemicals for the control of hard water scale. Hydrotron equipment consists of a bronze pipe unit, installed in the water supply line, and an electrical control unit mounted in a convenient position nearby.

Hydrotron is not a water softener, the manufacturer states. The water is not changed chemically. There is, however, an electro-physical change that takes place after treatment, in which the process of nucleation is affected.

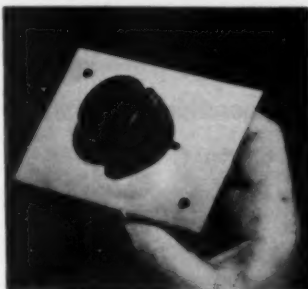
Admiral Polish Protects Enameled Appliances

KEY NO. B-625

CHICAGO—A new polish and wax, specially developed to protect the enamel surfaces of refrigerators and ranges, and the lacquer surfaces of television sets, has been introduced by Admiral Corp.

The liquid polish cuts surface dirt and film, and leaves a protective coating of tough carnauba wax. After drying for a few moments, it can be polished.

The new polish retails for about 98 cents a pint and will be distributed through Admiral dealers.



Assembly Speeded Up by New Refrigeration Socket

KEY NO. B-626

MILWAUKEE—Development of a new refrigeration socket designed to simplify and speed assembly has been announced by United Mfg. & Service Co. here.

Trade named "Twist-Lok," the socket is built of molded rubber. It is so designed that it can be simply inserted into a special die cut in the liner, from either the front or back, depending on the assembly method, the company explained. A quarter turn positions the socket and creates a protective vapor seal.

The wire light guard which inserts into holes in the face of the socket locks the socket in place, prevents twisting or any possibility of destroying the seal, plus creating a sturdy lamp guard, according to the company.

Twist-Lok (patent applied for) is an addition to a line of special components developed by Unilectric for use in product wiring systems produced by the company.

New literature on the socket is now available.

Fountain Uses Only One Ice Cream Box Opening



KEY NO. B-628

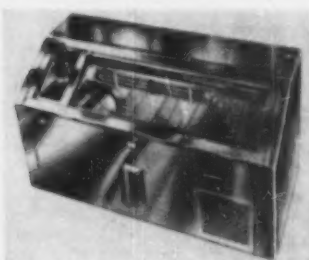
DENVER—Smith-Werner Co. here, manufacturer of "Serv-All," a complete soda fountain that fits into any ice cream cabinet, has added another model to its line, according to Ross Dunshee, president.

The new model—the No. 200—features a standard two-way draft arm with soda water cooled by the conventional pre-cooled water bath method, two syrup jars with sanitary pumps, and two crushed fruit jars with 1-oz. ladles as well as a spoon and straw holder, chipped ice compartment, and drain.

This unit, said Dunshee, occupies only one opening of any standard

ice cream cabinet and enables the operator to serve sundaes, sodas, malts, shakes, floats, and soft drinks.

Serv-All No. 200 may also be used in conjunction with any of the three other models of the Smith-Werner line, "thereby supplying maximum service with minimum space and investment."



Bevo Combines Water, Beverage Cooler

KEY NO. B-629

ST. LOUIS—The Bevo Co., Inc. here, manufacturer of beverage coolers, is offering a combination unit which serves as both a beverage cooler and a water cooler.

Buyers will find, the company said, that the space required for two separate items—a beverage cooler and a water cooler—will sometimes interfere with limited-space operation.

Therefore, it was stated, Bevo has added water equipment to its beverage cooler to fill the need for a combination unit.



Packaging has improved lots of things!

U. S. PAT. NO. 2,297,918



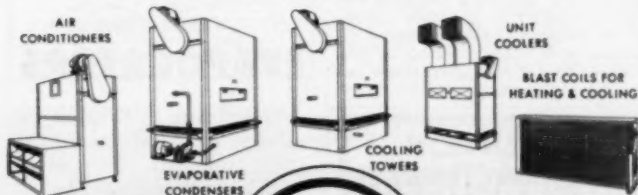
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ORIGINATORS OF COMPLETELY PACKAGED AIR CONDITIONERS

Packaging makes many products more efficient, more convenient and more acceptable these days. And large size packaged air conditioners (up to 60 tons) are no exception!

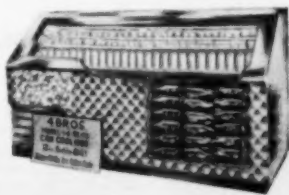
That's why so many Governair Completely Packaged Air Conditioners are in use today. They are engineered and built by the pioneers of large size packaged air conditioning — Governair!

If you want a package deal that will do a better job of air conditioning for you choose Governair! Sized from 3 to 60 tons. GOVERNNAIR CORPORATION, 513 N. Blackwelder, Oklahoma City, Okla.



GOVERNNAIR

ORIGINATORS OF COMPLETELY PACKAGED AIR CONDITIONERS!



Combination Ice Cube, Beverage Cooler Developed

KEY NO. B-627

PHILADELPHIA—A "combination beverage cooler—ice cube maker—frosted glasses cooler" has been developed as a single refrigerated cabinet by 4-Bros. Refrigeration Mfg. Co. here.

Designed for use in restaurants, night clubs, taverns, or clubs, the stainless steel unit features a shelf that holds and frosts up to 75 glasses at one time.

In addition to this unique feature there is storage space for dry cooling 1,800 12-oz. bottles daily and Roto trays for making 150 lbs. of ice cubes daily.

Stainless steel sliding doors make every part of the case readily accessible and the quilted stainless steel finish lends eye appeal to the cabinet. Construction is marked by 3-in. insulation and a waterproof tank.

Self-contained or remote type models are available in 4, 5, 6, 7, and 8-ft. cabinets, all 27 in. deep and 39 in. high.



Crystal ice... without sludge-forming rust, sediment, mineral residue... chlorine taste... "milky" taste... Ends major source of service calls. Write for new literature.



FILTRINE MANUFACTURING CO. BROOKLYN 5, N. Y.

For EASY SALES and FAST TURNOVER

FLEX UNIT

Stainless Steel

PASS-THRU

Reach in

REFRIGERATOR



- **LATEST** of 93 standard styles and models from 11½ cu. ft. to 73 cu. ft., including dough-retarders, salad refrigerators and reach-ins, all in self-contained and remote models.
- **LARGER COILS** for higher humidity (75 to 80%) and greater refrigeration efficiency.
- **THERMOPANE GLASS DOORS**—triple thickness—available on most models.
- **REMOVABLE STAINLESS STEEL** angle tray slides can be incorporated in any reach-in.
- **ALL METAL** construction, including doors.
- **5-YEAR WARRANTY** available on self-contained units.

Write for Catalog of self-contained and remote Reach-ins, Pass-Thrus, Dough Retarders, Salad Refrigerators, etc.

STAINLESS FOOD EQUIPMENT CO.

272 New Street

Newark 4, N. J.

SLANTS on Service

"Slants on Service" is a handy "package" devised by the NEWS to meet the needs of its busy readers in the service and contracting business.

How To Loosen Rods That Are Too Tight

There are some eccentric rods that require heating in order to get them on the shaft and when they are on the shaft they cool and "grab" the shaft so tightly that you can't turn them. If you run into one of these the thing to do is to hit the rod across or with the shaft, with the peen end of a ballpeen hammer and expand the rod until it is loose on the shaft.

Should you get a piston rod a little too tight when taking it up, you might do this to loosen it. Take a punch and apply the small end to the rod where it embraces the shaft. Hit the punch with a hammer in a row of small raps across the rod until the rod is as loose as you desire it.

5-Lb. Cylinder of Ammonia Neutralizes Sulphur Leaks

A 5-lb. service cylinder filled with anhydrous ammonia is extremely useful when combating sulphur dioxide leaks under emergency conditions, according to H. A. Halls, manager of Refrigeration Service, Inc., Los Angeles parts wholesaler.

In a letter to John Hopp, chief chemist for Anala's Refrigeration Research, Halls points out that "there are several satisfactory ways that SO₂ can be discharged from a refrigeration system when this discharge is previously planned. There are, however, emergency conditions that arise where obtaining comparatively large quantities of lye and water or aqua ammonia are not practical.

"To eliminate the personal hazard and also some resulting property damage when sulphur dioxide is escaping under emergency conditions,

we equipped our service mechanics with a 5-lb. refrigerant cylinder full of anhydrous ammonia. Of course, these cylinders were equipped with steel valves, and the valves we chose were equipped with a long tapered needle and fine thread so that an accurate flow of ammonia could be controlled with the least difficulty.

"We found that the service mechanic could enter an area thoroughly saturated with SO₂ and in a matter of seconds, this could be neutralized with anhydrous ammonia, resulting in hardly any more damage than the white precipitation that could be easily dusted away or picked up by a vacuum cleaner. The amount of ammonia released could easily be adjusted so as to give a mixture whereby the mechanic could smell neither the sulphur dioxide, nor the ammonia.

"We have had experiences where after neutralizing the SO₂ in the air, the ammonia cylinders could be placed in a position close to the discharging SO₂ with the two refrigerants neutralizing each other until a complete stoppage of the flow could be accomplished.

"Up until the present time, we still furnish a shop repair service to our service mechanic customers, and many times find it necessary to dispose of a pound or two of liquid SO₂ here in our shop. We have been very successful in using this procedure, mixing the two refrigerants directly in front of our exhaust fan. The success of this procedure is evidenced by the fact that we have as yet to receive one complaint from our neighbors.

"We have offered this suggestion to many of our customers, who have adopted these cylinders filled with anhydrous ammonia as standard service equipment on all of their service trucks."

How To Drill Porcelain

Probably everybody knows how to drill porcelain without chipping, but for those who don't, here it is. Take a piece of gummed paper and after wetting the gummed side, stick it to the place on the porcelain that you wish to drill. Do not use a center punch as it will be found that the drill will start easily and will not "walk" from the place you start it.

N. W. Day Co. Takes Over Marsden & Wasserman Refrigeration Department

HARTFORD, Conn.—Marsden & Wasserman, Inc., wholesaler of refrigeration, air conditioning, heating, oil burning, boiler room, and industrial plant equipment, announced that it has formed The N. W. Day Supply Co. and that the new company has taken over its entire refrigeration department.

Nevin W. Day, who has been an executive of Marsden & Wasserman for some time, has been appointed president and manager of the new firm, whose office and warehouse is located at 93 Edwards St., Hartford.

Stock of the new corporation is held by the stockholders of the parent company, but the new concern is not a subsidiary of Marsden & Wasserman, the latter stated.

Marsden & Wasserman discontinued handling refrigeration supplies June 1. It said all of its refrigeration inventory, certain furniture and fixtures, and all of its refrigeration accounts payable and receivable will be transferred to the new company.

Actual moving of some items, however, may not take place for several weeks "due to the fact that we cannot move these items so quickly," Marsden & Wasserman said.

For the next few months the parent company will guarantee the accounts payable of the new company "so that the transition can be smoothly and easily accomplished."

Marsden & Wasserman said "Nevin W. Day has done an outstanding job for our company" and "it is our desire to honor him by giving this new company his name. We are positive that this change is a good one for all of us."

Bowles Named Ramseur Heating, Air Conditioning Sales Engineer

SPARTANBURG, S. C.—Homer D. Bowles has been appointed air conditioning and heating sales engineer for V. D. Ramseur & Sons, 235 E. St. John St., this city. The firm also has branch offices in Greenville and Anderson.



Tempcon's New, Larger Quarters Speeds Operations



NEW SHOWROOM and general offices of Tempcon, Inc., Minneapolis. Additional space and modern shipping facilities help speed daily orders. Officers of the company from left to right are: P. E. Schoenholtz, treasurer; Wally Anderson, secretary; Gene Coulter, vice president; and John Wheeler, president.

MINNEAPOLIS—Orders are being filled and shipped the same day they are received since Tempcon, Inc. moved its wholesale refrigeration and heating operation to new and larger quarters, according to J. W. Wheeler, president.

The new location provides 12,000 sq. ft. of floor space—8,800 sq. ft. on the main floor and 3,200 in the basement. Facilities include a loading dock and ramp which leads directly to an elevator for ease in moving the heavier equipment in and out of the basement.

Tempcon started its wholesale refrigeration and air conditioning supply business in September, 1946, in a one-story building covering 1,900 sq. ft. This space soon proved inadequate and three additional warehouses were added within two years. However, this setup slowed down operations of the shipping department to such an extent that it was decided new quarters were necessary.

The company serves Minnesota, North and South Dakota, western Wisconsin, and the Upper Peninsula of Michigan.

Wagner Appoints Brown Executive Engineer

ST. LOUIS—The appointment of George W. Brown as executive engineer has just been announced by the Wagner Electric Corp.

Brown has been with the company since Aug. 2, 1926. He joined the company as a student engineer following his graduation from Ohio State university. After completion of his student engineering training he was assigned to the engineering department where he specialized in the development, design, manufacture, and application of fractional horsepower motors.

In January, 1937, the company decided to expand the previously existing employment and safety departments into a complete functional personnel department and Brown was appointed personnel director.

In December 1942, Brown, who had been a reserve officer since 1930, was called to active service.

Returning to Wagner in 1945, Brown was appointed industrial relations director in complete charge of the company's entire industrial relations work. He remained in this position until his appointment as executive engineer.

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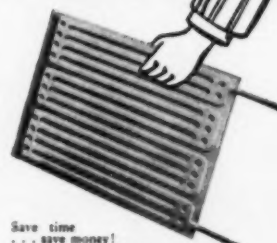
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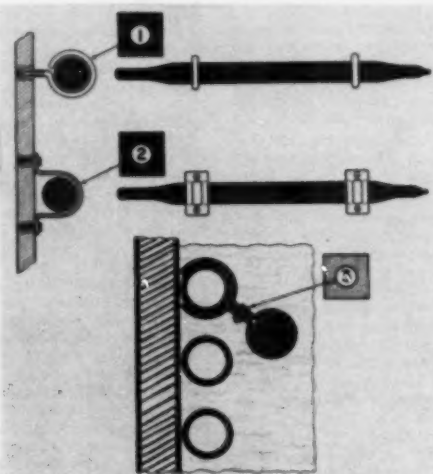


FIG. 21 shows three types of clamps that can be used for mounting feeler bulbs of controls.

11—Where To Locate Bulb of Control

On most commercial types of installation the manufacturers' engineers have spent much time in positioning the feeler bulb to the unit to obtain operating characteristics they are striving for. It is possible to control the air temperature of a fixture with the feeler bulb located against the coil within a very close differential. However, as was stated in the previous paragraph, this is strictly an engineering problem of the cabinet manufacturer.

Where the feeler bulb is installed in circulating air or circulating liquid, then the feeler bulb will respond to the temperature of the air, or liquid, passing over its surface.

An example of the installation of the feeler bulb on an evaporator to maintain constant air temperature in the box can be found in your domestic refrigerator at home. On most domestic refrigerator installations

the feeler bulb is attached to the evaporator and it actually anticipates the temperature change that will exist in the refrigerated space.

We could go on and on at this point in many types of discussion regarding temperature, humidity, and various other phases of refrigeration. However, the outcome of our discussion would always end up with the same answer—temperature and how best to obtain it.

In many tests that have been run it has been found that many domestic refrigerator controls have differentials as wide as 17°. However, the refrigerated area of the box is held at rather close differentials. What actually occurs under these conditions is that the feeler bulb is controlling the temperature of the evaporator, and through air circulation the cold air from the evaporator is refrigerating the space in the box. By maintaining a definite evaporator temperature, the box can be maintained in a very satisfactory manner.

Commercial control installations vary from the domestic type because there are fewer commercial types of installations that are completely engineered by the manufacturer. To make a replacement on a commercial type of control, it is essential that you obtain a control with an adjustable differential and with a range within the operating temperatures that you want to secure, or maintain. We recommend the White-Rodgers 1600 series control for this type of application.

You may have to check the installation with your thermometer to determine the proper location for the temperature sensitive element, unless you know the characteristics of the control that you are replacing.

The series 1600 control is easily set and easily adjusted as we have previously pointed out. Much time and effort can be saved on the average installation by using this type of control on most installations.

One point to remember—if you can install a feeler bulb in circulating air or circulating liquid, you can depend upon the differential of the control and the setting of the control to give you the results that you desire. If you have to install the feeler bulb on the surface of the evaporator or on a coil then you must survey the unit to get the bulb to respond to desirable operating temperatures.

Various types of clamps that are recommended for securing a feeler bulb to pipe coils or evaporator surfaces are shown in Fig. 21.

Probably one of the most simple

types of bulb clamps that you can use would be an ordinary screw eye that you can obtain at almost any hardware store. The screw eye can be inserted in the wall of the fixture and the feeler bulb slipped into the eye of the screw as shown by "1" in Fig. 21. Of course, on this installation you would have to have a fixture with a soft sidewall preferably made of wood.

Pipe clamps (see "2" in Fig. 21) make very successful types of feeler bulb clamps. Here again it is necessary that we have a fixture with walls of soft material to secure the clamps.

In "3" of Fig. 21 is a clamp that has been very successfully used for holding the feeler bulb. It is made of two pieces of strap iron held together by a bolt in the center.

One reason why this is a desired clamp is that it is designed so that you can change the location of the feeler bulb in order to properly place it for the operation of the system. The clamp can be swung in such a position that the bulb can be brought in close proximity to the coil, or can be extended away from the coil.

At this point we would like to bring out that it is not good practice to design a clamp that will squeeze or bend the feeler bulb. A slight amount of free area around the bulb is very satisfactory.

Also capillaries should be handled carefully. It is an unsatisfactory situation when the capillary is twisted or knotted. As we have pointed out previously, any excess capillary that you may have can be fastened inside of the cooler or can be mounted on the outside of the cooler.

Joseph Askin Joins Kramer Trenton Staff

TRENTON, N. J.—Joseph Askin has recently joined the engineering staff of Kramer Trenton Co. here.



Joseph Askin

Askin comes to Kramer with approximately 30 years of experience with leading engineering firms.

Before his Kramer Trenton affiliation, Askin was chief engineer with Techniflex Corp. in Port Jervis, N. Y., where he did design work

on window air conditioners, flexible hose, vibration eliminators, and refrigeration and air conditioning components.

His three years with Techniflex followed a year as chief engineer of the Electromatic Div. of Simonix Corp. in Chicago, where he designed refrigeration and air conditioning components, and two years as a consulting engineer for radiation and air conditioning equipment.

From 1944 to 1947, Askin was chief engineer for Peerless of America, where he designed commercial refrigeration and radiation equipment and supervised experimental testing. Before that, Askin was with Fedders Mfg. Co. in Buffalo for 21 years. As chief engineer at Fedders, he did experimental work on automotive and aircraft radiators, oil coolers, air conditioning coils, and other equipment on which he was granted over 30 different patents.

E. L. Hill Will Manage Refrigeration, Cooling For D. A. Olson Co., Inc.

SALT LAKE CITY—Edward L. Hill has been appointed manager of the newly created Refrigeration and Air Conditioning Div. of D. A. Olson Co., Inc. here, it was announced by Don A. Olson, superintendent of the plumbing and heating firm.

Olson said the new division was developed after the firm received a dealer franchise from Chrysler Air-temp Sales Corp. The firm will carry a full line of air conditioning equipment and maintain service facilities.

The new division makes it possible for the Olson Co. to render complete engineering service, including designing, sales, and equipment installation, in the fields of air conditioning, refrigeration, and heating.

The company started in May, 1948, with an office space of only 10 by 20 ft. and has since grown to become a major business in the Salt Lake City area.

Olson pointed out that the first year, the firm's business volume was between \$11,000 and \$17,000. However, in 1951 the volume of the firm increased to almost a quarter of a million dollars.

Officials of the firm are all young men, the oldest being only 30. Olson, M. C. Larsen, vice president, and L. E. Kunkel, secretary-treasurer, all graduated from the School of Engineering, University of Utah, in 1943.

Hill has served as manager of the service department for the company since it was organized.

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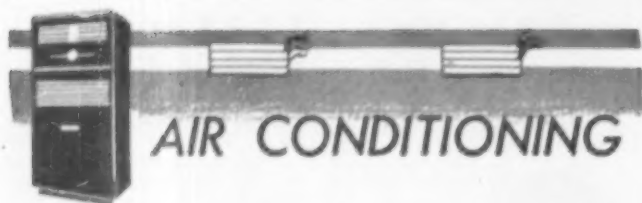
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50-Ton Central System Cools 3 Apartment Motels

MIAMI BEACH, Fla.—A group of three two-story apartment motels of unusual modern design has been completed on Collins Ave. here which feature central station all-year air conditioning from packaged equipment. It is reported by the Airko Air Conditioning Co., United States Air Conditioning Corp. dealer.

The three new 62-room buildings, known as The Tahiti, The Bali, and The Magic Isle, were designed by Norman M. Giller, architect, without interior hallways, so that every room is an outside room with a private entrance.

Second floor accommodations are reached by exterior stairways leading to covered balconies running the full length of each building on two sides. The motels also have air conditioned main lobbies and coffee shops.

The central plant air conditioning systems use 50-ton UnAirco DRK self-contained equipment, connected to the individual rooms by supply and return duct systems.

These units, which contain built-in evaporative condensers for water recirculation, are equipped with two complete 25-ton refrigeration circuits,

for economy of operation under varying load conditions.

The equipment can operate at half-capacity in moderate weather or when all of the rooms are not occupied.

Jules Channing, engineer, designed the system.

The dual circuit feature also meets the problem of compliance with the local limitations on starting current, without the use of reduced voltage starters. A time delay relay prevents the two compressors from starting simultaneously, thereby reducing the starting current requirements by one half.

3 Packaged Units Cool Waco Optometrist's Patrons

WACO, Texas—Three packaged air conditioning units make it possible for customers of Davis Optometrists here to be fitted for glasses in comfort.

The concern is located in a 50-ft. section of a jewelry store. The section is enclosed by a glass partition across which are signs reading: "Refrigerated Air Conditioning." Frigidaire units are used.

'Reheat Package'

Carrier's Optional 'Humidry' Uses Hot Condenser Water For Greater Control of Humidity with Package Units

Editor's Note: Air conditioning engineers are showing increasing interest in the problem of obtaining more control over humidity when a package unit is confronted with a high latent load while the sensible load is reduced. The system which Carrier offers as optional equipment for its conditioners will be of interest.

WASHINGTON, D. C.—How Carrier Corp. designed a method of using hot condenser water for reheat, thus giving its package air conditioners greatly increased control over humidity, was outlined by Jack Schmidt of Carrier at the Refrigeration and Air Conditioning Engineers Technical Conference held at Bolling Air Force Base here by Headquarters, United States Air Force.

Carrier calls this its "Humidry" control and make it available as a "reheat package" on its complete line of 50K series package conditioners from the 3-ton 50K4 model through the 15-ton 50K16.

"The Humidry application for the Air Force was developed by Carrier especially to meet its particular requirements in conjunction with Carrier self-contained Weathermakers," it was explained. "This control application was devised to meet the specific needs of process conditioning required by the Air Force. These re-

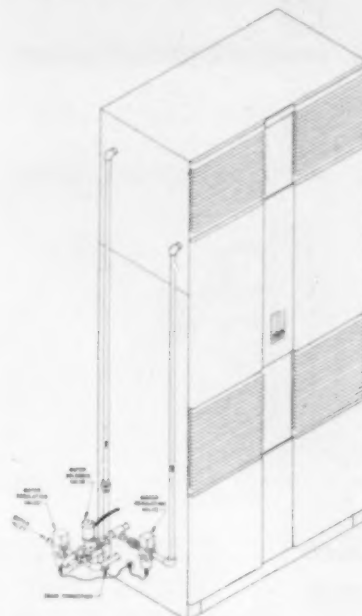


Fig. 1 shows piping diagram of Carrier reheat system using hot condenser water as applied to its 3 and 5-ton package conditioners.

quirements call for dehumidification which may be required when cooling is not needed.

"In these applications some form of reheat is essential for control during full or partial load operation. Air Force applications in general require process conditioning where the maintenance of constant temperature together with low humidities are both required.

"Simultaneous control of both temperature and low humidity is only obtainable with reheat. There are numerous ways and means of accomplishing reheat, such as using steam, hot water, or electricity, but the Humidry method using hot condenser water is a simple, foolproof system," Carrier declares.

CONTROL MUST BE SIMPLE

"The control arrangement, it was recognized, must be simple in order that installation, maintenance, and operative personnel can operate the equipment at its greatest efficiency with minimum training.

"This system," Carrier claims, "eliminates exceedingly complicated and delicate controls previously used to obtain the equivalent results. It should be noted that this control system is developed on the principle of utilizing only existing standard elements, such as the heater coil and water valves normally used with this equipment, and therefore is readily available as a standard accessory.

"The additional controls required

for the system that are not normally used as an accessory for any other purpose have been selected as standard instruments readily available from several sources of manufacture.

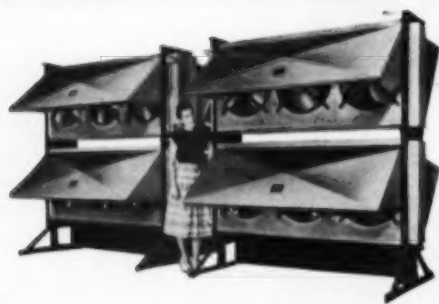
"It should be noted also," Carrier comments, "that the system has been developed to obtain the amount of reheat necessary entirely from the condenser water. This eliminates the need for any additional equipment as a source of external heat.

"The capacity of the Humidry re-

(Concluded on next page)

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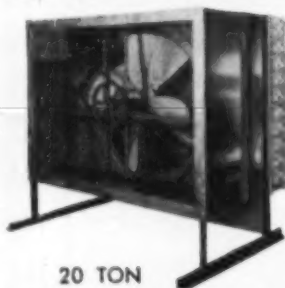


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AIR CONDITIONING & REFRIGERATION NEWS

How Carrier 'Reheat Package' Works

(Concluded from preceding page)

heat control will offset the sensible heat capacity of the supply air under most conditions, so the unit may thus operate as a dehumidifier only without cooling if desired. The control arrangement also provides for maximum possible reheat under all conditions, even at partial loading," it is claimed.

Piping diagram for a typical Humidry reheat system is shown in Fig. 1, which is the hookup Carrier uses for its 50K4 and 50K6 (3 and 5-ton, respectively) package air conditioners. In these as in the larger models in the line, a standard heating coil serves as the reheat coil.

The two vertical pipes shown on the left side of the unit in the sketch are, of course, the inlet and outlet lines through which the hot condenser water flows to the reheat coil in the plenum section of the conditioner.

Control elements of the system include a thermostat, humidistat, relay, water regulating valve (in addition to the standard water regulating valve), and a water solenoid valve.

These controls, except for the thermostat and humidistat, are shown in the piping diagram of Fig. 1.

The electrical elements of the system are shown in Fig. 2, which is the wiring system of the 3, 5, and 7½-ton Carrier units equipped with the Humidry system.

SEQUENCE OF OPERATION

Sequence of control operations on the 3, 5, and 7½-ton units is as follows:

When the Selector switch is placed on "Fan," the fan motor starts and continues to run.

When the Selector switch is moved to "Cool," the compressor motor is placed under the control of the thermostat and humidistat.

If the thermostat calls for cooling, the double-throw relay is energized, supplying power to the compressor motor starter holding coil. Power is also supplied to the water solenoid valve (in the outlet from the condenser), keeping that valve open.

When the thermostat is satisfied, the relay is de-energized and the compressor shuts off. The water solenoid valve is also de-energized and closes.

If the humidity is higher than the setting of the humidistat, the contact will be closed, supplying power to the compressor motor starter holding coil. The water solenoid valve remains closed. Therefore, the condensing pressure increases until the water regulating valve in the line to the reheat coil opens and allows the condenser water to circulate through the reheat coil to the drain.

When the humidistat is satisfied, the compressor will shut off.

CONDENSER WATER DIVERTED

If the thermostat should call for cooling when the humidistat is keeping the compressor running on reheat, the relay will be energized. This keeps the compressor running but opens the solenoid water valve, which shuts off the reheat by diverting the condenser water directly to the drain instead of to the reheat coil.

The condenser water for the unit, of course, enters through the conventional unit water valve and then flows into the condenser. The unit water valve, Carrier advises, should be set to maintain 100 to 105° F. condensing temperature during peak load operation.

During the straight cooling cycle the hot water from the condenser outlet passes through the open water solenoid valve into the drain. The hot water can't flow through the reheat coil because the second water regulating valve in this circuit is closed. This valve should be set to maintain approximately 110° F. condensing temperature, but must be set to shut off at a temperature above the normal unit condensing temperature.

CONTROLS FOR LARGER UNITS

Sequence of control for the two largest models in the Carrier Weathermaker line—the 10 and 15-ton units—is substantially the same as with the smaller machines. It is a little more complicated, however, because the two big models each have two compressors which operate in steps, depending on the cooling load.

If the cooling load is light, only one compressor cuts in, but if the load is heavier, the second machine is also started.

When the low temperature switch of the thermostat calls for cooling,

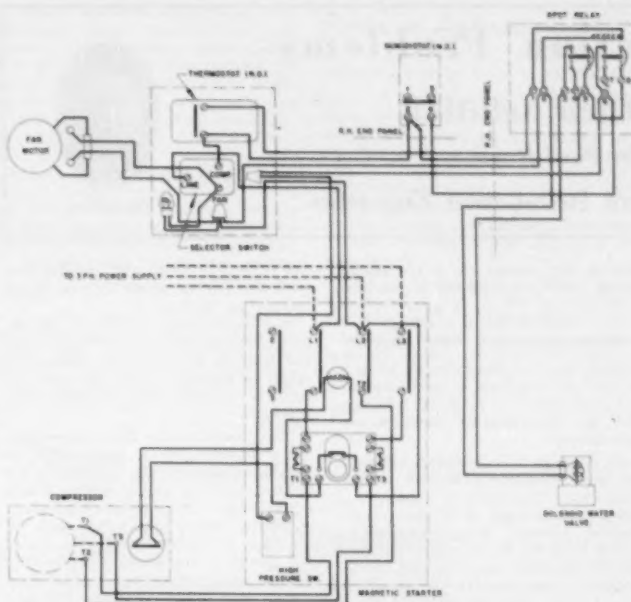


Fig. 2 shows wiring diagram of Carrier's "Humidry" reheat system as employed on the 3, 5, and 7½-hp. conditioners. This hookup is for 208 or 220-volt, 3-phase, 60 cycle current.

the first machine cuts in, the second compressor being started when the high temperature switch of the thermostat calls for cooling. As the temperature drops, the compressors cut out one at a time.

When the humidistat calls for dehumidification, though, both compressors are started, and the hot condenser water is circulated through the reheat coils as with the smaller

conditioners having only one compressor.

Carrier's 50K series of packaged units equipped with reheat control can also be operated in conjunction with a cooling tower. In this case, however, the unit water valve is not employed, though the water regulating valve in the line to the reheat coil must be used.

The water line in Fig. 1 marked

"to drain" will be the line going to the cooling tower.

If a cooling tower is employed, the water pump must be carefully selected, Carrier points out. Capacity of the pump and pump motor should be checked at two conditions:

(1) Normal operation with no reheating. (The water is circulated through the condenser, tower, and interconnecting piping, including the water solenoid valve.)

(2) Operation with reheating. (The water flow now is through the tower, condenser, water regulating valve, reheat coil, and interconnecting piping. There is less water flow than in normal operation without reheating but the head is increased.)

When the humidistat calls for dehumidification, the water flow will be shut off momentarily just before the hot condenser water is forced up to the reheat coil. Because of this, a positive displacement water pump should not be used unless a relief by-pass is provided to prevent the motor from over-loading.

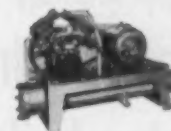
Nunn Acquires New Bldg.

AMARILLO, Texas—Nunn Electric Supply Co., distributor for Carrier air conditioners, has acquired a spacious building here which will be utilized for office and warehouse space. Carl Hare, head of the firm, says the structure provides some 12,500 sq. ft. of floor space.

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Refrigeration Problems and their solution

by Paul Reed

For Service and Installation Engineers



Paul Reed

Automatic Defrosting (10)

While we are on the subject of defrosting, the brine spray method should be mentioned although, as a rule, it is manually operated, rather than automatically.

The use of brine spray as a defrost method is generally confined to large cold storage plants, although in late years, it has been applied to smaller installations such as locker plants, wholesale frozen food storage rooms, industrial processes, etc.

Brine defrosting is done in very much the same manner as water defrosting, as far as the evaporator is concerned. The brine is sprayed or flowed over the evaporator from spray nozzles or other orifices just above the evaporator.

The brine from the evaporator is caught in a drain pan and carried away by sloping drain lines. Unlike the water in a water-defrost system, which is usually wasted to the sewer, the brine is re-circulated in a closed

system by means of a circulating pump, and back over the evaporator.

REHEATING AND REFRIGERATING THE BRINE

However, two things must be done to the brine before it goes back to the evaporator; it must be reheated, and its concentration must be re-established.

In passing over the cold evaporator, and in melting the ice on the evaporator, the brine is chilled to a lower temperature. If it were re-circulated without being reheated it would soon be so cold that it would not be effective, and the rate of defrosting would slow down. The brine would "run out" of heat in much the same manner as hot gas does in hot-gas defrosting unless supplementary heat is added. So before returning to the evaporator, the brine must be reheated.

As the brine flows over the evaporator, the ice melts and the resulting water mixes with the brine and, of course, weakens the brine. If this continual weakening every time the brine passed over the evaporator is permitted to continue, the brine will soon become very weak. Moreover,

the volume of brine will increase and soon become too great for the closed circulating system.

The brine must therefore be re-concentrated, that is, the water from the melting ice from the evaporator must be removed from the brine, in order to keep the brine at its original strength.

The "weak" brine from the evaporator passes into a regenerator or reconcentrator tank where it is heated, and the excess water driven off as vapor. The rate of evaporation of water from the brine may be speeded up by removing the vapor by means of a vapor pump or fan.

The concentrator tank therefore serves to not only keep the strength of the brine up to normal but it also reheats the brine back to the temperature required to accomplish a rapid defrost.

KIND AND STRENGTH OF BRINE

In the larger installations, the brines used are generally calcium chloride or sodium chloride (ordinary salt) solution. Other brines are sometimes used, such as lithium chloride or lithium bromide solutions.

The required strength of the brine is governed chiefly by the temperature of the rooms in which the evaporators are located. The freezing point of the brine, even the "weak" brine from the evaporators, must be kept below the storage room temperature, for if the brine is to be permitted to remain in the brine supply lines to the evaporators and in the brine drain lines, the brine must be strong enough that it will not freeze at the lowest temperature at which the room is maintained.

Obviously, if the evaporators are the forced-air circulation or "blower" type, the fans must be stopped when brine defrosting begins; otherwise brine spray will be blown out over the stored products. Especially this must not be permitted if the brine used for defrosting is calcium chloride or sodium chloride, both of which are corrosive.

Moreover, care must be taken that the brines have thoroughly drained from the evaporators after defrosting, before the fans are again started.

NO-FROST BRINE SYSTEMS

In some large installations, the air in the room is circulated through a "curtain" or spray of cold brine. The air is chilled in the same way as if it were passed over an evaporator coil. The brine with its heat from the room, then passes back in a closed system to a brine-cooler, where its temperature is reduced and it is again pumped back to the room.

After the air passes through the cold brine spray, it passes through a system of louver-like "eliminators," that serve to remove any entrained droplets of brine in the air from the spray. Otherwise, the dewpoint temperature of the air to the room is the same as if the air had passed over a coil of the same temperature of the room.

With an evaporator, the moisture in the room air deposits on the evaporator coil and fins, because they are at a lower temperature than the dewpoint of the warmer, moist room air. Exactly the same thing happens with a brine spray, except that instead of the moisture removed from the room forming as frost, it is simply condensed and absorbed by the brine. The brine therefore becomes somewhat weaker and must be kept up to strength by concentrators or addition of calcium chloride or whatever salts are used.

Another "no-frost" system, known under the trade name of "Kathabar," uses a finned evaporator of the blower type, but keeps it constantly sprayed with a lithium chloride brine. The moisture in the incoming room air is chilled, condensed, and absorbed by the brine.

After passing over the evaporator, the brine falls into sump, from which it is pumped back to the spray heads above the evaporator. Some of the "weak" brine containing the moisture condensed from room air is taken from the circulating pump outlet and by-passed through a "regenerator" where its concentration is brought back to normal, after which it is put back into the sump.

WEAKER BRINE INSTEAD OF FROST

In the two "no-frost" systems just described the brine absorbs the moisture from the room air that would otherwise be deposited on the evaporator. The water removed from the room air is taken from the brine and disposed of by the "regenerator," "concentrator," or other device for removing enough moisture from the brine to keep its strength up to normal.

In other "no-frost" systems, moisture is removed from the incoming room air by silica gel, activated alumina, or other desiccants, down to a dewpoint corresponding to the evaporator temperature. Therefore, no frost forms on the evaporator.

SEMI-AUTOMATIC CONTROL

Of interest is a control that is set manually but stops the defrost automatically. In one form, when the user wishes to defrost, he turns a pointer to a number on a calibrated dial corresponding to the length of time he wishes defrosting to last. In turning this pointer, he winds a clock spring. The clock runs for the length of time indicated on the dial, and then trips the switch, stops defrosting, and restoring the system to the regular refrigeration control.

MANY SYSTEMS, MANY VARIATIONS

To those readers who have followed this series on automatic defrosting it must be apparent that there are many methods, systems,

combinations, and variations. Some designers and manufacturers prefer one method or variation, and some prefer others. Which is best, depends to a large extent on the particular equipment and on the specific needs of that application.

It has not been possible in this series, to cover all of the details and variations of all of the various systems of defrosting. The author could not hope to do more than explain the basic fundamentals of the principal methods of defrosting, and some of the possible combinations and variations, and to point out some of the chief advantages, disadvantages, and pitfalls to avoid in each.

Automatic defrosting is comparatively new, for its popular appeal and spreading use has resulted principally from the enormous increase, particularly since World War II, in the use of frozen foods. Equipment for the freezing, storage, display, and merchandising of frozen foods has been developed rapidly, and the end of that development is not in sight. Along with the equipment must come further development and perhaps some stabilization of methods of automatic defrosting.

Since the start of this series on automatic defrosting several letters have been received from manufacturers, dealers, and service engineers. Some of the subjects brought up will be discussed in future issues.

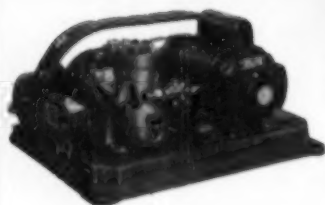
"General Electric quality
counts with my customers...
helps build my business."

Max Freeman

Refrigeration Service Engineer
302 Maryland Avenue, Paterson, New Jersey



FAVORITO'S FOOD CENTER, an independent self-service market in Ridgely Circle, New Jersey, is well known to its many neighborhood customers for garden-fresh vegetables and fruits. An extensive meat department is supplied by its own large cutting room. The merchandising of these perishable items, as well as frozen foods and dairy products, requires dependable, trouble-free operation of refrigeration equipment. Shown in his modern market with Mr. Freeman is Mr. Thomas Favorito, owner.



G-E Open Unit
Water-Cooled CWC311

Mr. Freeman installed and services six General Electric Condensing Units for the freezer room, walk-in room, and four display cases. He reports that his customers "ask for G-E units because of their dependability and economy of operation."

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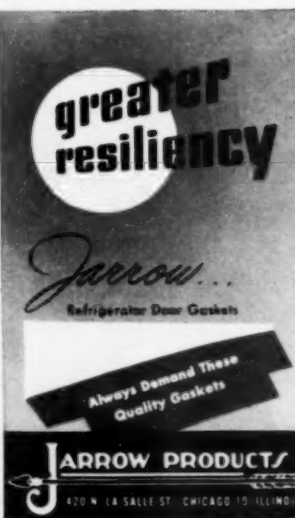
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Not Everybody Likes Fast Defrost--

(Concluded from Page 1, Column 4) customer makes her first mistake when she neglects cleaning.

"The great majority of complaints are against icicles that form and the freezing together of frozen food packages as the result of defrosting," Miss Rogers said.

From the users' point of view, according to Miss Rogers, the solution is "just make the water drain off better," while engineers, she said, "are inclined to suggest this remedy—'consumer education.'"

The latter is not the answer, she indicated, because "you can't depend on a sales presentation today; most instruction books aren't read, and home demonstration after the sale, while very effective, is not done in 100% of the cases."

At least one engineer on the program, J. R. Hornaday of Norge, readily admitted the complaints cited by Miss Rogers and summed up his comments with the statement: "The true value of high-speed defrosting is still a question in my mind."

IMPROVEMENT IN WATER RUN-OFF SUGGESTED

Possible improvement in water run-off for automatic defrosting was seen in a newly developed plastic finish called "Teflon" which was described by O. J. Spaw of du Pont at the conference.

Other talks given at this conference included a summary of various automatic defrost methods presented by C. F. Alsing of Seeger; energy equations for evaluating defrost systems, by S. J. Williams of International Harvester; defrost controls, by R. G. Raney of Ranco; and descriptions of the following defrost systems:

Norge, by Hornaday; Westinghouse, by M. Kalischer; Crosley, by Walter Kuenzli; International Harvester, by H. R. Ball; and Seeger, by R. W. Ayres.

General chairman of the Domestic Conference was C. D. Harris of International Harvester.

YEAR-ROUND AIR COOLING DISCUSSED

At the Packaged Air Conditioner Conference various methods and problems involved in supplying year-round air conditioning for residential applications were outlined. Paul Moore of York was chairman.

Described were Servel's all-gas conditioner employing gas heating and an absorption cooling system, by H. C. Pierce; General Electric's all-electric packaged heat pump, by G. K. Marshall; Servel's combination gas heating-mechanical cooling system, by S. F. Shawhan; York's packaged conditioner for application to existing forced hot air heating systems, and (in the discussion period) Acme's self-contained "Flow-Cold" liquid chiller by A. B. Newton.

In addition, E. A. Freund of Union Electric Co., St. Louis utility, reviewed present and future markets for residential year-round systems to keynote the conference.

"When I see the percentage of

saturation that has been reached with the domestic refrigerator, the air conditioning industry can achieve any reasonable goal if it does a good enough selling job," Freund told the group.

PROPER APPLICATION CITED AS IMPORTANT

While describing in detail the various types of packaged units, the other speakers stressed the importance of proper application for successful year-round conditioning regardless of the type of equipment used.

"The air distribution system is just as important as the equipment," was the way one speaker phrased it.

A variety of topics were also discussed at the regular technical sessions. These included "Generalized Pressure-Volume-Temperature Properties of 'Freon' Compounds" by B. J. Elsemann of du Pont; "Fundamentals of Refrigerant Piping," C. W. Leegard of G-E; "Response of Metals to Very Low Temperatures," W. T. Ziegler of Georgia Institute of Technology; "Method of Evaluating Refrigerator Oils for Stability," H. M. Elsey, L. C. Flowers, and J. B. Kelley of Westinghouse; "Predicting Behavior of Oils in Refrigeration Systems," C. M. Bosworth of Carrier.

"Design and Construction Problems of Tonnage Oxygen Plants," by Irving Roberts of Mellon Institute; "Calorimeter for Finding Heat Leakage of Household Refrigerator Cabinets," G. P. Marcy, Westinghouse; "How Safety Provisions May Prevent Accidents," C. T. Baker, consulting engineer; "Atomic Radiation as It Might Affect the Refrigeration Industry," L. E. Brownell, University of Michigan; and "Freezing of Poultry" by C. P. Gorce of the Frick Co.

TECHNICAL RESEARCH EXHIBIT A NEW FEATURE

A distinct innovation for an ASRE meeting was the "Technical Research Exhibit" held primarily in conjunction with the Domestic Engineering Conference on what was said to be an experimental basis. There were nearly a dozen exhibits.

Du Pont, for example, had a working demonstration of its new "Teflon" plastic finish claimed to improve water run-off; Ferro Corp. demonstrated by means of a laboratory model electric furnace the new Ferro-Republic one-coat porcelain enamel process "eliminating the ground coats and/or the necessity for using premium steel."

Monsanto Chemical had several display boards featuring numerous plastic and chemical items; Fusite Corp. had operating cutaway models of hermetic compressors using its glass-fused-to-steel terminals; Ranco demonstrated its new defrost control featuring the fail-safe power element; Dow Chemical demonstrated vacuum molding of high impact Styrene sheets and showed its newest product—Styrofoam 33—a self-extinguishing polystyrene insulation.

General Electric's Special Products Div. had a working model of its

ultrasonic cleaner which uses high frequency sound vibration for such processes as cleaning small parts; Spencer Thermostat showed how the temperature of electric motor windings can be measured while the motor is running by measuring resistance (a method developed by R. E. Seely of G-E).

Ransburg Electro-Coating Corp. showed equipment and movies of its No. 2 Electro-Spray process, a method of spraying paint based on the principle of electrostatic atomization; Philip Carey Mfg. Co. showed samples of its "Carey-duct" all-asbestos air conduit.

Also on display were models of the Penn State-Armstrong Cork Co. water vapor transmission cell which provides a method of measuring water vapor transmission through insulating materials and vapor barriers.

Rathbun Appointment--

(Concluded from Page 1, Column 3)

post of plant manager created the vacancy filled by Rathbun's appointment, is an engineering graduate of the University of Southern California and has served as an instructor for night classes in air conditioning and refrigeration at this institution. His father, the late Bert Hanson, was one of the founders of the company, it was noted.

One of Rathbun's first official acts was to appoint J. C. Nofziger as advertising manager. Nofziger has specialized in industrial advertising and was advertising manager of Drayer-Hanson in 1946 and 1947, and in the interim period operated his own agency.

Only Long Steel Strike Can Affect Consumer Goods

DETROIT—It would take a long steel strike to bring any great effect on production of refrigeration and air conditioning equipment, and major appliances, most observers have agreed.

The steel workers walkout has brought about no great rush—especially by consumer durable goods manufacturers—to try to find steel supplies.

Plentiful inventories, plus some reduced production schedules, have made most manufacturers in the industry confident that they can weather a steel strike of two or three weeks' duration without suffering any loss of production.

There's always one that's better...and in controls it's Ranco!



Ranco controls are the most popular in the Refrigeration Industry. More than 35,000,000 Ranco controls are in use throughout the world. Whether your job involves domestic or commercial refrigeration, remember this... Ranco controls are available for over 4,000 replacement installations.

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FULL VISION FREEZER CASES

54" high Freezer Cases, porcelain in and out.

FULL VISION CASES

Porcelain in and out. 54" high cases... 41" high Full Vision Lowboy... 41" high Double Duty Lowboy... porcelain or formica tops.

DELICATESSEN CASES

Porcelain in and out... 54" high—3 shelves.

BUTCHER CASES

Porcelain in and out... Double Duty Cases; Single Duty Cases. 34" wide and 40" wide.

REACH-IN FREEZERS

Upright Reach-In Freezers... self-contained... all sizes. Porcelain in and out; stainless in and out; stainless front, aluminum ends.

OPEN SELF-SERVICE

Porcelain in and out. Dairy Cases... Meat Cases... Vegetable Cases... Open Milk Cases—Self-contained; Self-Defrosting Freezers.



REACH-IN BOXES

All sizes... remote and self-contained. Porcelain in and out... Stainless in and out. Stainless front—aluminum ends.

WALL BOXES

Porcelain in and out. Dairy Wall Boxes. Beverage Wall Boxes. Dairy Wall Boxes—self-contained.



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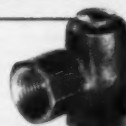
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an all service nozzle that can be easily cleaned without removal from pipe.



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a real mist-maker that leaves no unbroken drops of water.



Marley nozzles are manufactured for the air conditioning, refrigeration and processing industries by the Marley Company, world's leading producer of water cooling equipment. Write today for Bulletin SM-35.



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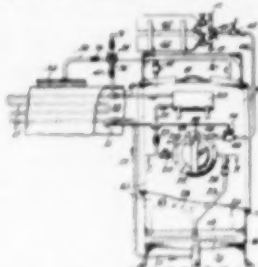
PATENTS

Week of April 22

2,595,726. METHOD AND MEANS OF REFRIGERATION. George C. Demetral, San Francisco, Calif., assignor to Perishable Shipping Equipment Co., a corporation of Nevada. Application May 21, 1949. Serial No. 58,493. 1 Claim. (Cl. 68-31.5.)

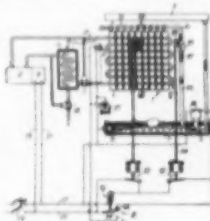
A self contained and readily portable refrigerating system comprising in combination, an enclosed space to be refrigerated, a separate closed container for an evaporable primary refrigerant, a closed refrigerating circuit for a low temperature liquid refrigerant passing in heat releasing relation with said primary refrigerant without direct contact therewith and passing through said space to be refrigerated in heat absorbing relationship, a separate and readily replaceable source of gas under pressure, means for regulating the pressure of the re-

leased gas, means driven by said released gas interposed in said closed circuit for effecting the positive circulation of the



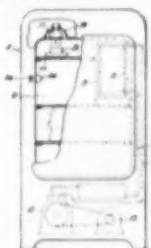
leased gas, means driven by said released gas interposed in said closed circuit for effecting the positive circulation of the

2,595,774. ICE-MAKING. William M. Grandis, York Township, York County, Pa., assignor to Flakice Corp., Brooklyn, N. Y., a corporation of Delaware. Application Oct. 25, 1948. Serial No. 57,156. 13 Claims. (Cl. 68-7.)



1. In apparatus of the character described, the combination of, ice forming means including a plurality of passageways through which liquid to be frozen flows and within which ice forms whereby the flow is restricted, means to supply the liquid to be frozen to said passageways, means forming an outlet at the entrance of said passageways whereby liquid flows through said outlet when there is a restriction in the flow through said passageways, and control means responsive to the flow of liquid through said outlet to discontinue the freezing operation.

2,594,963. INFRARED RAY BUTTER SOFTENER. Earl V. Hubacker, Highland Park, Mich., assignor to Borg-Warner Corp., Chicago, Ill., a corporation of Illinois. Application April 28, 1948. Serial No. 590,296. 5 Claims. (Cl. 68-4.)

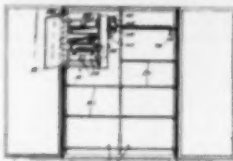


3. In a refrigerator cabinet provided with a cooling chamber that is supplied with coolant fluid by an electric motor driven compressor, a lamp in said cabinet adapted to emit heat rays, means for supplying electric current to the motor to drive said compressor, means for supplying electric current to said lamp, and a thermo-sensitive device coacting with both said means for rendering one means ineffective during the operation of the other means.

2,594,958. REFRIGERATOR HAVING FREEZER AND STORAGE COMPARTMENTS WITH SEPARATE CONTROLS. Andrew R. Knapp, Marion, Ohio, assignor to Bots Corp., Hammond, Ind., a corporation of Indiana. Application May 14, 1948. Serial No. 57,881. 3 Claims. (Cl. 68-3.)

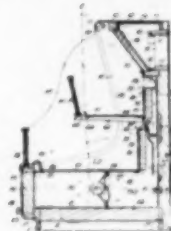
1. In a refrigerator having a freezer

and a separate food compartment, refrigerating coils in said freezer, a plate in said freezer, a plate in said freezer cooled by said coils, a slave circuit having



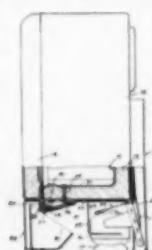
a first portion arranged in heat-absorbing relation to said food compartment and in heat-conductive relation to said plate, and also having a heat-discharging portion arranged in direct conductive relation to a portion of said refrigerating coils, a motor-driven fan for circulating the air in said food compartment and directing air to be cooled into contact with said heat-absorbing portion, a first thermostatic element located in the food compartment for controlling the operation of said fan, and a second thermostatic element responsive to the temperature of said plate for controlling the cooling effect of said refrigerating coils.

2,594,968. TWO-DECKER DAIRY SELF-SERVICE REFRIGERATOR. Richard E. Faber, San Antonio, Tex., assignor to Ed Friedberg, Inc., San Antonio, Tex., a corporation of Texas. Application June 13, 1949. Serial No. 167,540. 3 Claims. (Cl. 62-49.5.)



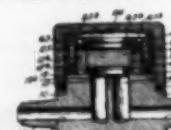
1. A refrigerated self service display case having a base with front and back walls, a shelf disposed in said case in spaced relation with said base, a vertically extending partition mounted on said base and engaging said shelf, a vertically extending rear wall on said shelf arranged in spaced relation with the back wall of said case, said rear wall terminating in a perforated horizontal flange and with a plurality of openings formed in said rear wall adjacent said flange, a second shelf disposed in said case superjacent said first shelf, said second shelf having a vertically extending rear wall terminating in a perforated horizontal flange engageable with the back wall of said case, the rear wall of said second shelf having a plurality of openings therein in adjacent its horizontal flange, the rear wall of said second shelf being spaced from the back wall of said case with the lower end portion of said rear wall extending below said second shelf and projecting between the rear wall of said first shelf and the back wall of the case to define a plurality of air ducts, refrigerating means positioned in each of said air ducts adjacent the rear walls and horizontal flanges of said shelves, an air circulating fan positioned in said partition for forcing a stream of warm air through said ducts and over said refrigerating means to cool said air prior to its delivery through the openings in said rear walls and the perforations in said horizontal flanges.

2,594,972. CONDENSATE DISPOSAL SYSTEM FOR REFRIGERATORS. Carl G. Robbins, Chicago, Ill. Application Aug. 6, 1949. Serial No. 42,933. 3 Claims. (Cl. 68-115.)



1. A condensate disposal system for a refrigerator including a cabinet and a refrigerant compressor, a condenser and an evaporator with refrigerant conduits connecting them, said conduit between the condenser and the evaporator being disposed beneath the bottom wall of the cabinet and being formed with a portion extending downwardly in spaced relation thereto, a drain for said cabinet, and a receptacle disposed opposite said drain and means for supporting said receptacle with said downwardly extending portion of the conduit adjacent the bottom thereof, said supporting means being formed to provide guides for lowering and raising said receptacle from around said conduit upon removal or replacement of the receptacle, the fluid in the receptacle being in heat transfer relation with the conduit when the receptacle is in position.

2,594,112. FLUID FLOW SIGHT GLASS. Joseph Ashka, Chicago, Ill., assignor, by mesne assignments, to Electromatic Co., a corporation of Illinois.

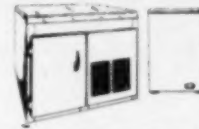


1. A sight glass unit, including: a body portion having a main flow passageway therethrough, a sight opening providing a line of view normal to the direction of flow through said main passageway, said opening communicating with said passageway; a transparent window-member closing the outer end of said sight opening and being sealed therein, the flow passageway beneath said window-member being greater in cross sectional area than that of said main passageway on either side thereof, and a highly reflective polished plane surface facing said window-member and parallel thereto but spaced therefrom so that at least a portion of the fluid flow through said passageway passes between said highly reflective surface and said window-member.

opening communicating with said passageway; a transparent window-member closing the outer end of said sight opening and being sealed therein, the flow passageway beneath said window-member being greater in cross sectional area than that of said main passageway on either side thereof, and a highly reflective polished plane surface facing said window-member and parallel thereto but spaced therefrom so that at least a portion of the fluid flow through said passageway passes between said highly reflective surface and said window-member.

DESIGNS

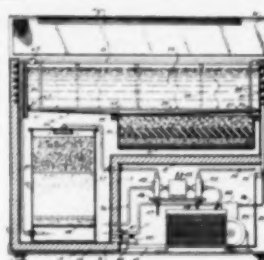
106,546. ICE-MAKER CABINET. Raymond Lowry, New York, N. Y., assignor to General Motors Corp., Dayton, Ohio.



The ornamental design for an ice-maker cabinet, as shown.

Week of April 29

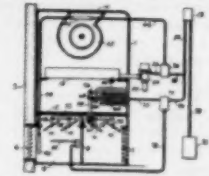
2,594,974. REFRIGERATED DISPLAY TANK. Lewis J. McGrath, Newtonville, Mass.



1. A display device for aquatic creatures comprising a liquid tank having heat-insulating walls and an open upper end, said walls being shaped to provide in the lower portion of the device a chamber having a length less than the length of the tank, a first filter mounted in said tank above said chamber, a perforated plate disposed in said tank below the upper end thereof and covering said filter, a closed container disposed in said tank adjacent the inner end of said chamber, a second filter in said container, two motor driven liquid pumps mounted in said chamber, conduit means connecting the inlet of one of said pumps to the interior of said tank near the bottom thereof and the outlet of said pump to the interior of said tank above said plate, conduit means connecting the inlet of the other of said pumps to the interior of said tank near the bottom thereof and the outlet of said pump to the interior of said container and connecting the interior of said container to the interior of said tank above said plate.

air introducing means connected into each of said conduit means, a refrigerating coil in the wall of said tank, and refrigerating apparatus mounted in said chamber and connected to said coil.

2,594,977. AIR CONDITIONING APPARATUS. Robert O. Miner and Arthur O. Anderson, La Crosse, Wis., assignors to The Trane Co., La Crosse, Wis.



1. An air conditioning unit comprising a radiator adapted to be connected to a source of heat exchange fluid, means for moving air through said unit, a valve for controlling the flow of heat exchange fluid through said radiator, a first thermostat responsive to the temperature of the enclosure served by said unit for controlling said valve, a second thermostat for controlling said valve, said second thermostat having a first temperature sensitive element in the air stream leaving said radiator, said second thermostat having a second temperature sensitive element in the outdoor air stream, damper means for admitting predetermined quantities of outdoor air and re-circulated air to said unit, power means for adjusting said damper means, said power means being connected to said first thermostat and being controlled thereby, a third thermostat for controlling said power means, said third thermostat having a temperature sensitive element in the outdoor air stream.

2,594,989. FREEZING MACHINE. Eugen Wülschewich, Haifa, Israel.



1. A freezing machine comprising an evaporator for a refrigerant capable of generating cold by evaporation; at least one oblong freezing can mounted upright within the evaporator and projecting therefrom at its upper and lower ends; a detachable bottom for the can; and lifting means including at least one compression spring adapted to raise and lower the bottom and to apply it with pressure to the lower end of the can.

(To Be Continued)

CLASSIFIED ADVERTISING

RATES for "Positions Wanted" \$5.00 per insertion. Limit 50 words. 15¢ per word over 50.

RATES for all other classifications \$7.50 per insertion. Limit 50 words. 15¢ per word over 50.

ADVERTISEMENTS set in usual classified style. Box addresses count as five words. Other addresses by actual word count. Please send payment with order.

POSITIONS WANTED

SERVICE MANAGER available June 15th. Twenty-five years experience in air conditioning-refrigeration and major appliances. Two years instructor in large vocational school. Ability to handle and train men and manage a service department at a profit. Aggressive and ability to assume responsibilities. Would consider a position as factory representative. BOX 4009, Air Conditioning & Refrigeration News.

POSITIONS AVAILABLE

SERVICE MAN experienced in air conditioning and both commercial and domestic refrigeration. Prefer man between 30 to 35 years old who will be interested in advancing to position of service manager. Give full details as to qualifications and experience in reply. MARION WEATHERTROL CORP., Ocala, Florida.

REFRIGERATION ENGINEER, degree in engineering preferred with experience in household refrigeration for exceptionally interesting sales position with large parts manufacturer. Prefer man 30 to 40 years of age. Give all details in first letter. Reply BOX 4006, Air Conditioning & Refrigeration News.

SALES ENGINEER—Established west coast manufacturer of commercial refrigeration requires experienced sales engineer to head heat exchange division. High potential in compensation and position with corporation. BOX 4014, Air Conditioning & Refrigeration News.

SALES MANAGER. Have outstanding opportunity in Florida. Must have ability to organize and direct sales force selling G-E residential and commercial heating and air conditioning. Annual sales goal \$400,000. Earnings potential \$10,000 up for right man. Reply BOX 4015, Air Conditioning & Refrigeration News.

SERVICE MANAGER—\$10,000.00 per year, salary and bonus. Capable commercial and air conditioning expert to take full charge of existing Chicago service department. Must have sound business ability and sufficiently sales minded to expand present volume. Your complete qualifications will be held confidential. BOX 4018, Air Conditioning & Refrigeration News.

EQUIPMENT WANTED

WANTED: TRADE-INS for export. We are buying trade-in refrigerators as-is, sealed units, 1940 and later models, 5½ cu. ft. and larger, all makes in any quantity. Please give us the quantity, make, model, size and year with your offer. AMERICAN ISRAELI MFG. CORP., 330 Seventh Avenue, New York 1, N. Y.

EQUIPMENT FOR SALE

FOR SALE—80 ton cooling equipment as follows: with magnetic starters and automatic controls; 2 Frick 4 cylinder Freon compressors 4½, 2 4½, Model F.W.-440; 2 40 H.P.-2000 coil 3 phase-60 cycle 1750 R.P.M. motors; 5 Aero fin coils, 4 pipes deep, 18 pipes high 81" x 26"; 1 80 ton Buffalo fan 33" x 42" delivery 20,000 C.F.M.; 3 new American coils model 20300. BOVAL REALTY CO., 312 38th Street, Union City, New Jersey.

\$52 BUYS standard brand ½-HP open type or sealed type complete units. Other sizes up to 3 HP. Write for complete listings on units and parts, including Kilzon overload relays @ 1¢. MANN REFRIGERATION SUPPLY CO., 440 Lafayette Street, New York 3, N. Y.

SACRIFICING MODEL FDS18A 18 cu. ft. display freezers with superstructure and Thermopane glass sliding doors. Only \$340 each, f.o.b. New York. List price \$714. For complete details, write or call MANN REFRIGERATION SUPPLY CO., 440 Lafayette St., New York, Gramercy 3-9000.

ATTENTION SERVICEMEN—Send for our new catalog—on controls, valves, relays, brass fittings, V belts—hermetic and open type units. All new merchandise at great savings up to 50%; all for money back guarantee. WALTER W. STARR REFRIGERATION, 2833 Lincoln Ave., Chicago 13, Illinois.

BUSINESS OPPORTUNITIES

ESTABLISHED COMMERCIAL refrigeration and fixture business, representing the best nationally known lines. Volume over \$500,000 annually, real money maker. Terms to right party. Western Penna. area, serving 300,000 population. Owner retiring. BOX 4012, Air Conditioning & Refrigeration News.

MISCELLANEOUS

NORGE SEALED units remanufactured or exchanged. Immediate delivery from stock. 3 year warranty. Freon refrigerant. Write for prices and shipping instructions. Genuine Norge Appliances for Norge sealed units. Set of three, \$115 plus postage. MODERN REFRIGERATION CO., INC., 1241 E. McNichols Road, Detroit 5, Michigan.

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Receive the greatest trade paper in the Industry—AIR CONDITIONING & REFRIGERATION NEWS. Published every week. Brings you latest news and vital information on household refrigeration, commercial refrigeration, air conditioning, home freezers; manufacturing, distributing, retailing, servicing, and contracting. Only \$5 per year, 52 issues.

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Company

Street

City Zone State

6-9-52



Government Contracts

DEPARTMENT OF DEFENSE

It is not necessary to refer solely to the issuing office for additional data on a bid invitation issued by any of the following U. S. Army Ordnance Offices: Ordnance Tank Automotive Center; Detroit Arsenal; Frankford Arsenal; Picatinny Arsenal; Hanover Arsenal; Rock Island Arsenal; Springfield Armory; Watertown Arsenal; and Watervliet Arsenal. Complete information on any purchase listed by any of those offices alone can be obtained from the Ordnance District Office nearest you. Its address is on file in your nearest Department of Commerce Field Office. Do not ask an Ordnance District Office for information on a purchase unless it is listed by one of the above-named offices. Ordnance District Offices do not have information on any other purchases.

Invitations for Bids numbers will be followed by the letter "B." Requests for proposals or quotations will be indicated in this column by the letter "Q," or, if numbered, the number will be followed by the letter "Q."

Description	Quantity	Invitation No.	Opening Date
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Purchasing & Contracting Office, Redstone Arsenal, Huntsville, Alabama

Chamber, test, temperature, spec air cooled, overall dimension 5 ft. 6 in. wide, 9 ft. 6 in. deep and 7 ft. high; internal dimension 30 in. high, 6 in. wide and 72 in. deep, stainless steel interior, temperature range minus 50 degrees F plus or minus 180 degrees F, full door opening with thermopane viewing, window forced air circulation within chamber Tenney model 37T or equal.	2	5775-S2	9 Jun 52
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Contracting Officer, Purchasing & Contracting Branch (WCUB) WADC, Wright-Patterson Air Force Base, Ohio

Invitation for Bid /B/ and Requests for Proposal /Q/ are distributed to firms listed in the Bidders List maintained by the above activity. A complete bid set is available for EXAMINATION ONLY by prospective bidders at the Air Regional Offices located in the local trading area of the above activity.

Liquid Refrigerant Pump, oil, pump, air compressor, and other specified equipment for liquid refrigerant pumping.	3 ea.	(RD-32-344-Q)	10 Jun 52
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Office of the Contracting Officer, Orlando Air Force Base, Orlando, Florida

Invitation for Bid /B/ and Requests for Proposal /Q/ are distributed to firms listed in the Bidders List maintained by the above activity. A complete bid set is available for EXAMINATION ONLY by prospective bidders at the Air Regional Offices located in the local trading area of the above activity.

Rehabilitation of the air conditioning system in the base photo laboratory; installation of complete air conditioning system including ducts, cooling tower and compressors at Base Communications, Orlando Air Force Base, Florida.	Job	(08-410-52-16-B)	11 Jun 52
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Officer in Charge of Construction, NOY 73666, U. S. Naval Station, New Orleans, Louisiana
Additional air conditioning Job 34727 17 Jun 52
facilities in building No. 16, U. S. Naval Station, New Orleans, Louisiana

GENERAL SERVICES ADMINISTRATION

Description	Quantity	Reference No.	App. Bid Date
Business Service Center, General Services Administration, Region 4, 56 Whitehall Street, S.W., Atlanta, Georgia			
Installation of Ventilation Fans, 118 West Hargett Street Bldg., Raleigh, N. C.	Job	CR4-264	6-18-52
General Services Administration, Denver, Colorado			
Walk-in Refrigerator	1 ea.	4734	6-9-52

CONTRACTS AWARDED THROUGH MAY 29

Description—Contractor and Address

Department of the Navy Bureau of Ships, Washington 25, D. C.
Cooling Coil, Type A, Size 41-66DF, DW.—106, \$107,771.—Mario Coil Co., St. Louis, Missouri.
Chilled Water Cooling Coils, Type A, B 41-66 DW.—125.—Mario Coil Co., St. Louis, Missouri.
Quartermaster Activities, Cameron Station, U. S. Army, Alexandria, Virginia.
Air Conditioning & Electric Heating Unit in Mobile Petroleum Laboratory Trailer.—\$25,000.—Equipment & Furniture Co., Inc., 114 East 32nd Street, New York 18, N. Y.
Frankford Arsenal, Philadelphia 37, Pennsylvania
Air conditioning system.—Job, \$248,630.—Willard Sales & Service, Inc.
Armed Services Medical Procurement Agency, 84 Sands Street, Brooklyn 1, New York
Refrigerator, Mechanical.—1,298, (Exceeds \$250,000).—F. W. Lang Co., 5225 Whittier Avenue, Philadelphia 33, Pennsylvania.
Corps of Engineers, U. S. Army, Philadelphia District, P.O. Box 9629, Philadelphia 1, Pennsylvania
Fan, air circulating, desk and wall.—4,000, \$86,290.—The Emerson Electric Mfg. Co., 8100 Florissant Ave., St. Louis, Missouri.
Air conditioning unit, skid mid, including maintenance tools.—27, \$41,715.—Mid-West Heat Service, 3336 West Franklin Boulevard, Chicago 24, Illinois.
Public Buildings Service, General Services Administration, Washington 25, D. C.
New roof vents and automatic temperature control of cooling towers at St. Elizabeth's Hospital, Warehouse, Laundry & Shops Bldg., Washington, D. C.—\$4,854.—William H. Singleton Co., Inc., 1240 Jefferson Davis Highway, Arlington 2, Va.

Sectional Freezer by Elliott-Williams Has Self-Defrosting Features

INDIANAPOLIS — Elliott-Williams Co. is now manufacturing a sectional reach-in freezer with a self-contained gravity circulation cooling coil with self-defrosting features.

The sectional arrangement allows these freezers to be carried through ordinary doors and set up in locations that would be impractical with one-piece construction.

Two men can easily set up these freezers as contrasted with a four or five men crew required for one-piece construction.

The sections are so arranged that they can be added to easily for future expansion at a fraction of the cost over the purchase of a complete new unit.

Insulation is 5 in. pre-formed semi-rigid Fiberglas bats sealed with hot refrigerator hyalalene. Pre-fitted sections arrive with the freezer doors already fastened in place.

The freezer is finished inside and out with mill finished aluminum alloy with the appearance of stainless steel.

The gravity circulation self-defrosting cooling coil is factory assembled into the top section as a self-contained defrosting unit. Gravity circulation, it is claimed, causes less drying out or dehydration of stored food products, particularly unwrapped products such as bakery goods.

Heat from defrosting has little effect on the stored food, because the coil is mounted at the very top

of the freezer with the heat being pocketed in the top away from the stored food products at a lower level.

The refrigeration cycle in defrosting is so arranged that it is impossible for condensing unit motor to become overloaded at any time either in defrosting or normal refrigeration cycle. Slugging of raw liquid refrigerant after the defrost cycle is prevented.

Refrigeration installation consists in running the usual liquid and suction lines from remote condensing unit placed anywhere, together with a hot gas defrost line.

Because of the sectional feature, these reach-in freezers are available in unlimited sizes, the smallest having a capacity of 70 standard bakery pans, 750 lbs. of frozen food capacity, and 72 2½-gal. ice cream cans.

Any refrigerating machine using "Freon-12," methyl chloride or sulphur dioxide can be used, supplied either by Elliott-Williams or the dealer.

Service Station In Atlanta To Be Opened by Sunbeam

ATLANTA—A new Sunbeam service and parts station was scheduled to be opened at 276 Pryor St. S. W. here on June 9 under the management of Wayne Schendel, according to John Gage, local representative of Sunbeam Corp.

Gage said the station, to be known as Sunbeam Appliance Service Co., will serve the southeast, providing service and parts for all Sunbeam products to both dealers and consumers. Schendel will supervise a staff of six persons.



OFF THE CHEST

READER GIVES DEFINITION OF EFFICIENCY EXPERT

Mechanicsburg, Pennsylvania

Editor:

Your editorial in a recent issue of the NEWS recalls to memory the following definition of an efficiency expert:

"An efficiency expert is a man who knows less about your business than you do—and gets paid more for telling you how to run it than you could possibly make out of it—even if you ran it properly—instead of the way he wants you to."

J. HENDERSON STOCK

RETAILER SPELLS EVILS OF TOO MANY DEALERS

The Canton Hardware Company
Canton, Ohio

Editor:

I have just finished reading your editorial, "There Is a Remedy for Evil Competition." May I venture a comment?

It is possible that too greedy manufacturers and distributors have been sowing dragons' teeth for the past six years? Haven't they been rather too eager to put in many dealers at the expense of the stable and dependable dealer? It looks to me as though this greediness has, in many cases, killed the goose. Let me give you an example right from our own company.

Before World War II we had been for a number of years the exclusive dealer in Canton for one of the leading makes of refrigerators. When the war ended, the manufacturer decided to put three additional dealers in Canton. As you will remember, merchandise was hard to get. It was distributed on a quota basis. The quota that was established for Canton was based upon what our prewar sales had been and this quota was divided equally among the three new dealers and our company, the old dealer; this in spite of the fact that we operated two retail outlets, whereas the other dealers had only one each.

For two years our salesmen had to send customers out of our stores because we could not assure any reasonable delivery, whereas the new dealers were usually able to make immediate or very quick delivery. Our salesmen were of course thoroughly disgusted with this unfair treatment. The result was that this make of refrigerator has in Canton today about four dealers whose combined sales are less than one-fourth

of the number of refrigerators that we sold as a single dealer in 1939 and 1940. This particular line of refrigerator is practically dead as far as Canton is concerned.

This is only one example of dozens I could cite you of other dealers and other manufacturers. I am sure you have observed the same thing. The manufacturers have made it very difficult for a legitimate dealer to operate with the margin he needs in order to maintain service and end up with a profit. That's one reason why dealers everywhere are going out of the appliance business.

J. W. BROTHERS
Executive Officer

'FREEZER-FOOD' PLANS PUT SHOE ON OTHER FOOT

J. Geo. Fischer and Sons, Inc.
1019 E. Genesee Ave.
Saginaw, Mich.

Editor:

It is very difficult for commercial refrigeration distributors to understand the protests of the food dealers to the so-called "freezer-food" plans which offer food without profit to the appliance dealer in order to sell a home freezer.

For many years, wholesale grocers, dairies, and ice cream manufacturers have been offering cases, coolers, and cabinets at wholesale to their food accounts in order to retain them as buyers of food. The same food merchant who purchased his case or cooler through a wholesale grocer on a distributor's cost basis is now shouting "Foul" when the shoe is on the other foot.

I sincerely hope that the bill sponsored by the refrigeration contractors of Detroit and recently introduced in the state legislature which will prohibit "footbaling" of one type of merchandise in order to sell another will be passed and that each industry will respect the rights of others.

RAY FISCHER, Vice President

READER FINDS NEWS AIDS ENGINEERING, SALES

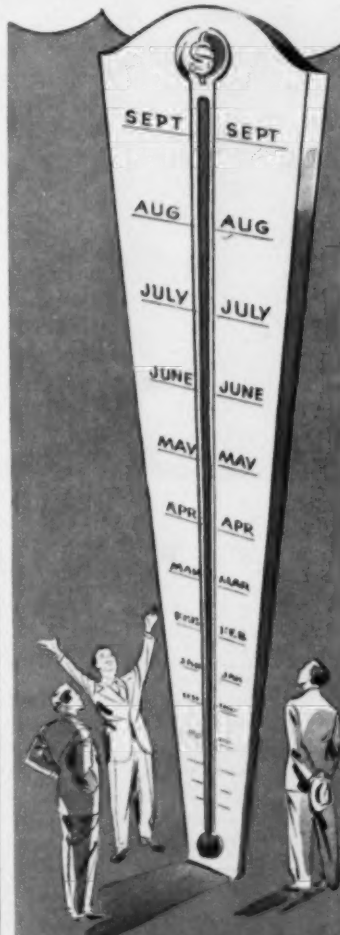
The Warren Co., Inc.
Los Angeles, Calif.

Editor:

Every week I read with great interest the latest issue of your valuable paper which is extremely useful and of the greatest help, not only in the industry but from an engineering as well as sales point of view.

ALBERT REBEL

Watch your summer profits
hit new highs with
SERVEL SUPERMETIC!



Hot and humid days leave no margin for delays — not when it's a matter of servicing a worn-out compressor. Customers stand to lose too much by waiting. And that's where you stand to gain a lot of sales ground . . . by cashing in on the double-edged selling advantage Servel Supermetic offers you:

1. Extra-quick pickup or delivery on your every requirement at your nearby Servel Wholesaler.
2. Extra-quality construction that keeps every customer sold on every Supermetic you install.

ANY TIME you're up against a down-and-out condensing unit, replace it with a reliable Supermetic. ANYWHERE there's a replacement prospect, remind him regularly of Supermetic superiority. You'll see your summer profits hit a new high . . . and keep on growing! Mail coupon for address of your nearest Servel Wholesaler.

SUPERMETICS ARE AVAILABLE FOR EVERY REFRIGERATION NEED . . . EVERYWHERE!

101 Authorized Servel Wholesale Suppliers carry a complete stock of Supermetics—in all sizes from ¼ to 3 HP—available with Servel's Low-Cost Factory Warranty.

MAIL COUPON TODAY FOR FULL FACTS!

SERVEL, INC.
ELECTRIC REFRIGERATION DIVISION
DEPT. A-61 EVANSVILLE 20, INDIANA

Send full details about Servel Supermetic and name of nearest Wholesale Supplier:

NAME (personal) _____

TITLE _____

COMPANY _____

CITY _____ ZONE _____ STATE _____

**Servel
SUPERMETIC**

Model for every commercial refrigeration and air-conditioning use . . . 1/8 to 3 HP.

Freezer-Food Plan Activities--

(Concluded from Page 1, Column 3)

Many of the recent developments in the freezer-food plan field had to do with words of caution to both plan operators and the public. Warnings and recommendations came from the National Food Distributors Association (NFDA), a district Office of Price Stabilization official, Better Business Bureaus in St. Louis and Washington, and others.

NFDA suggested that its members go on record as warning housewives that wholesale savings claimed for consumers by some plan promoters "are often nebulous, to say the least."

Also, homeowners signing contracts to purchase cabinets "should make sure that the promoters possess the ability to deliver frozen foods of standard quality at actual wholesale prices," the association stated, adding:

"The situation is fraught with disappointment to housewives if the wholesale savings claimed on the foods is added to the cost of the cabinet or its installation and delivery charges. It is especially important to know if the foods delivered are of inferior quality."

According to NFDA, a number of quick frozen food distributors have complained because their names were given to housewives coupled with an unauthorized statement by the cabinet promoter, claiming that

the distributing firms would fill the appliance at wholesale.

In Fresno, Calif., Russell Pavay, acting director of the district OPS, warned that OPS regulations forbid requiring a person to purchase a freezer in order to buy beef items in quantity.

"Purchases of freezers or other appliances and purchases of beef must be separate transactions," he pointed out. "The purchasers of either commodity must have a free choice as to what they buy without any tie-in arrangement."

Better Business Bureaus in St. Louis and Washington issued recommendations pertaining to the advertising and selling of freezer-food plans.

The St. Louis BBB guide lists two points not included in some BBB standards. They are:

"Extra charges (e. g., for delivery, cutting, wrapping, financing, etc.) which must be paid, and which will affect specific prices quoted or general savings claims made, must be mentioned conspicuously and in immediate conjunction with such prices or claims."

"Any illustration used in connection with a specific offer shall accurately depict the freezer to be delivered in connection with the offer being made."

The Washington BBB announced

its suggested freezer-food standard and advertising guide after an extensive study of savings claims made in local promotions. The bureau's recommendations were presented at a meeting attended by some 50 representatives of appliance and food firms and newspapers and radio stations.

Also in Washington, an appliance dealer ran advertisements in local daily newspapers advising the public to "read the facts before you buy a food and freezer 'tie-in' plan."

Sidney P. Faber, president of Faber-Benson's, said the facts were that consumers don't have to buy a freezer to get food at "so-called 'wholesale' prices," buy a large initial supply of food to get a freezer, sign long-term contracts with a particular food firm, purchase particular brands of freezers, or pay more than the regular cash price for the freezer.

The dealer offered to give customers from \$80 to \$100 worth of frozen foods, depending on the size of the freezer they buy, and to introduce them to area food wholesalers as further sources of supply.

But, he said: "I tell them to go to their corner grocer and tell him how much and what they want to buy. They can generally get their food from him just as cheap, if they purchase in any quantity at all, as they can from a food distributor."

In the same city, the Electric Institute of Washington, the *Times-Herald*, and appliance dealers launched a "Home Food Freezer Festival" that will last one month.

One reported objective of the campaign will be to urge freezer purchasers to patronize their local retail food store.

NEMA Firms Sell 298,092 Refrigerators in March

Summary for March and First Three Months, 1952
Complete Refrigerators Only—Sales by Sizes—Units

MARCH (16 Companies)

Sizes	Domestic (48 States and D. C.)	Canadian	Other Foreign	Total
1. Less than 4 cu. ft....	1,435	...	274	1,709
2. 4 cu. ft. ....	...	...	...	...
3. 5 cu. ft. ....	...	...	...	...
4. 6 cu. ft.	15,540	...	3,357	19,197
5. 7 cu. ft.	22,180	730	1,874	24,784
6. 8 cu. ft.	73,067	643	6,107	81,817
7. 9 cu. ft.	73,709	1,311	2,634	80,654
8. 10 cu. ft.	29,489	534	1,202	31,225
9. 11, 12, 13 cu. ft. and up	57,272	177	1,273	58,722
10. Total	278,972	3,290	17,721	298,092

FIRST THREE MONTHS (16 Companies)

Sizes	Domestic (48 States and D. C.)	Canadian	Other Foreign	Total
1. Less than 4 cu. ft....	...	...	...	...
2. 4 cu. ft.	4,407	...	608	5,165
3. 5 cu. ft. ....	...	...	...	...
4. 6 cu. ft.	55,975	174	9,730	65,879
5. 7 cu. ft.	78,361	2,280	6,726	85,367
6. 8 cu. ft.	189,545	2,352	14,174	206,071
7. 9 cu. ft.	198,495	2,747	6,694	207,936
8. 10 cu. ft.	103,646	1,645	3,325	108,616
9. 11, 12, 13 cu. ft. and up	168,580	250	3,511	172,341
10. Total	797,069	9,448	44,838	851,355

Participating companies: Admiral Corp.; Avco Mfg. Corp.; The Coolerator Co.; Deepfreeze Appliance Div.; Motor Products Corp.; Frigidaire Div.; General Motors Corp.; General Electric Co.; Gibson Refrigerator Co.; Hotpoint Inc.; International Harvester Co.; Kelvinator Div.; Nash-Kelvinator Corp.; A. J. Lindemann & Hoverson Co.; Norge Div.; Borg-Warner Corp.; Philco Corp.; Refrigeration Div.; Sanitary Refrigerator Co.; Seeger Refrigerator Co.; and Westinghouse Electric Corp.

New York Licensing Proposals--

(Concluded from Page 1, Column 3)

Spokesmen for American Federation of Labor groups opposed the measure chiefly on the ground that it would have an "adverse effect" on union membership and might create jurisdictional disputes among local unions.

Myron D. Miller, representing the Refrigeration Industry Safety Advisory Committee, declared that licensing would limit the number of persons going into business and would not eliminate bad workmanship "if there is any."

Miller said that "safety" had been advanced as a prime factor in the consideration of the licensing measure, and he offered the following testimony in refutation of the concept that present-day refrigeration systems offer a hazard to public health and safety:

1. There has not been a single fatality caused by "Freon" refrigerants in the 20 years they have been in use in the U. S.

2. The Industrial Commission of Ohio has paid over 2 million compensation claims in the past few years. Of this number, only 11 involved refrigeration; of the 11, six were household refrigerator cases.

3. The New York City Fire Depart-

ment reports that there has not been a single fatality in recent years caused by commercial refrigeration and air conditioning.

4. Refrigeration accidents are so rare that the insurance companies do not have a classification covering refrigeration.

The following other points were made against contractor licensing:

The public suffers by restrictive licensing because of higher costs, brought about by restriction of competition.

Licensing is inequitable. A license board is given power to review not only the applicant's ability, but his "character and fitness" as well.

If any incompetents do exist, licensing will not eliminate them.

Licensing does not in any way insure safe and high quality installation. A mere holding of a license, even though it may be based on some type of examination, in no way guarantees that an installer will do a competent job.

Refrigeration contractor licensing will tend to limit New York City contractors from doing business in other cities. Experience shows that when one city enacts a licensing law that keeps outside contractors from taking jobs within the city, other cities in the area immediately react with similar restrictive ordinances. Should New York enact such a measure, the whole country would quickly be hit with restrictive refrigeration licensing.

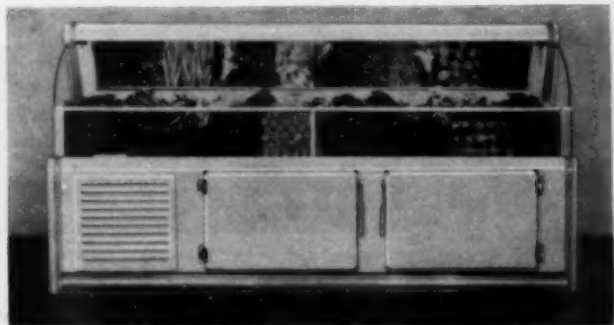
Support for the contractor licensing proposal came in a presentation by Nathan Edelstein, representing the Refrigeration & Air Conditioning Guild, Inc., who said that the bill, if passed, would assure the public of higher standards of workmanship and would assure safe installations.

Edelstein stated licensing would "weed out the undesirables" and would maintain needed supervision over all those entering the business.

CHIEF PRODUCT ENGINEER

Chief Product Engineer wanted by national manufacturer of commercial refrigeration. Full responsibility for product development, research, design, laboratory testing, and inspection. High level compensation for qualified man. Mail resume of experience to Box 4011, Air Conditioning & Refrigeration News.

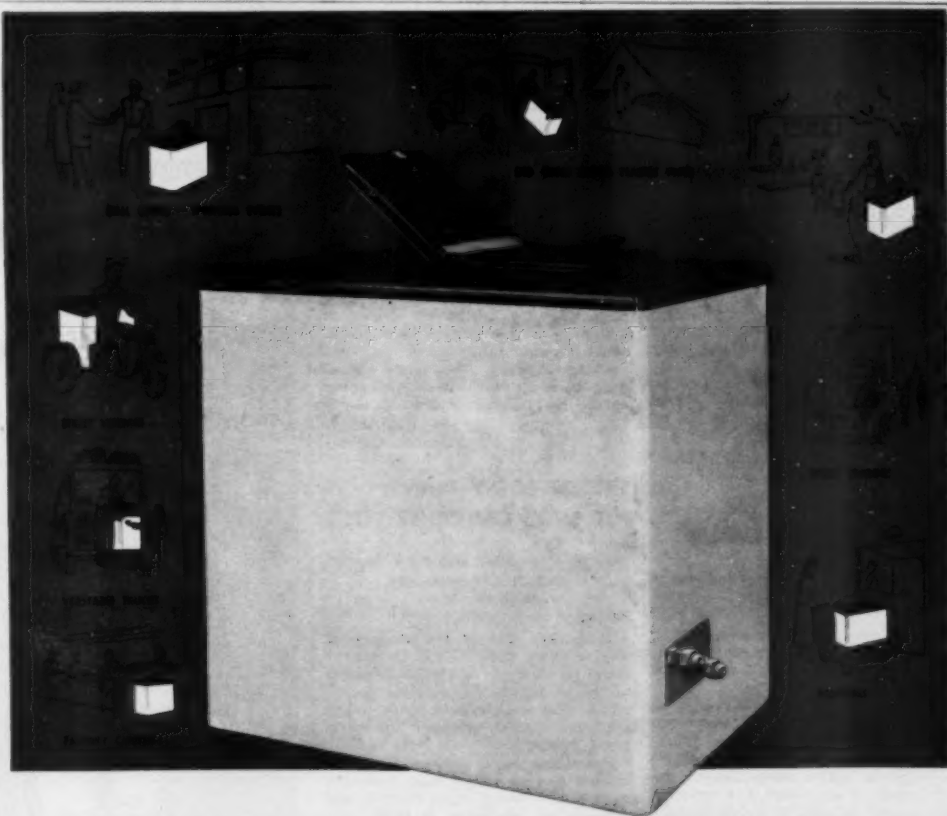
WARREN MODEL COUS PAYS BIG PROFITS



The careful research of The Warren Company's engineers to meet the needs of retail stores for a utility display-and-storage case is proving its worth.

Stores that have installed the Warren COUS report it is a

small investment for its value in stepping up so drastically sales and profits of produce, dairy products, or packaged meats. For free literature in full color, address Warren Refrigerators, Atlanta 1, Ga.



NOW! mobile refrigerated vending without dry ice

in the HOLD-OVER Vending Cabinet

Here is the Mobile Vending Cabinet you've been looking for... one that keeps its contents as uniformly cold as a compressor-cooled store installation. Although mobile, it requires no dry ice and you have no electrical or other connections to make on location. Predetermined low temperatures are maintained for 10 to 12 hours by the "Hold-Over" principle, a method of refrigeration fully proved through wide use in the transportation of ice cream and perishable foods.

You can mount a "Hold-Over" Vending Cabinet on a motor scooter or as a side car to a bicycle for street vending. You can deliver it by pick-up truck to corner vending stations for specific picnic groups, ball games or other sporting events. You can provide facilities for the transportation and sale of ice cream and frozen foods on non-insulated trucks and on trucks equipped only for medium temperature operation.

Send today for descriptive literature and prices.

KOLD-HOLD

protects every step of the way

